VEAL CALF PROTECTION ACT

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON LIVESTOCK, DAIRY, AND POULTRY

AND THE

SUBCOMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH, AND FOREIGN AGRICULTURE

OF THE

COMMITTEE ON AGRICULTURE HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

H.R. 84

JUNE 6, 1989

Serial No. 101-18

Printed for the use of the Committee on Agriculture

U.S. GOVERNMENT PRINTING OFFICE
23-609 WASHINGTON : 1990

H 161-10

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

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VEAL CALF PROTECTION ACT

TUESDAY, JUNE 6, 1989

House of Representatives, Subcommittee on Livestock, Dairy and Poultry, Joint With Subcommittee on Department Operations, Research, and Foreign Agriculture, Committee on Agriculture,
Washington, DC.

The subcommittees met, pursuant to call, at 11:25 a.m., in room 1300, Longworth House Office Building, Hon. Charles W. Stenholm (chairman of the Subcommittee on Livestock, Dairy, and Poultry) presiding together with Hon. George E. Brown, Jr. (chairman of the Subcommittee on Department Operations, Research, and Foreign Agriculture).

Present from the Subcommittee on Livestock, Dairy, and Poultry: Representatives Campbell, Johnson, Harris, Rose, Volkmer, Penny, Nagle, Long, Gunderson, Lewis, Smith, Walsh, and Grant.

Present from the Subcommittee on Department Operations, Research, and Foreign Agriculture: Representatives Brown, Rose, Stenholm, Olin, Volkmer, Jontz, Roberts, Grandy, and Walsh.

Also present: Representative E (Kika) de la Garza, chairman of the committee; and Representative Bennett.

Staff present: John E. Hogan, minority counsel; Alice Devine, minority associate counsel; Glenda L. Temple and Grace McGovern, clerks; Daniel B. Waggoner, Theresa Green, James A. Davis, and Carol Ann Dubard.

OPENING STATEMENT OF HON. CHARLES W. STENHOLM, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. Stenholm. This joint subcommittee public hearing will come to order.

Today, both the House Agriculture Subcommittee on Livestock, Dairy, and Poultry and the Subcommittee on Department Operations, Research, and Foreign Agriculture, look forward to receiving testimony and written statements from a very distinguished and broad-based slate of witnesses focused on H.R. 84, the Veal Calf Protection Act.

I would be remiss indeed if I did not immediately acknowledge the strong support which this legislation has received over the last several years by its principal sponsor, Congressman Charlie Bennett of the Third Congressional District of Florida. In fact, we look forward to having Congressman Bennett as our first scheduled witness today in support of H.R. 84.

As a livestock producer myself, I would hope no one actively involved in animal agriculture today would ever disagree with the premise that the welfare of one's livestock is of paramount concern. In fact, you show me a producer who knowingly abuses his or her own livestock in any way and I will show you a producer that is soon to go broke.

Let there be no doubt that the health and proper care of animals is the key to a successful livestock-raising venture. Regretfully, the consuming public today is generally unaware of farmers relationship to their animals and how meat, milk, and eggs are produced on modern farms.

Moreover, farmers tend their livestock, guaranteeing their health and welfare, thereby providing an economic return in the form of the most wholesome, high-quality foods found anywhere in the world at the cheapest price found anywhere in the world.

Granted, we have not yet developed the perfect livestock management system and inspection programs. There are areas which need to be improved based on the best sound science.

Today's modern farm animal production system is no accident. Technological advances being employed are the result of millions of dollars of private and Government research into how to raise healthy farm animals.

Yes, farmers have always enjoyed broad public support for their efforts to provide abundant nutritious food; however, that support is beginning to erode and it is due time that all of agriculture go on the offensive in telling their story of the benefits surrounding modern production practices.

In conclusion, let me emphasize again how it is in the farmer's own best interest to see that the animals on his or her farm are treated humanely. Recognizing that agriculture is a very competitive industry, the so-called bad actors in the industry can either comply with tested and accepted practices and standards or meet their fate, which is sure to come.

[H.R. 84 and the report from U.S. Department of Agriculture follow:]

I

101st CONGRESS
1st Session

H. R. 84

To prohibit certain practices in the raising of calves for veal, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 3, 1989

Mr. **BENNETT** (for himself, Mr. **BATES**, Mr. **MCGRATH**, Mr. **WILSON**, Ms. **PELOSI**, Mr. **SCHEUER**, Mr. **SHAYS**, Mr. **ACKERMAN**, Mr. **YOUNG** of Florida, Mr. **OWENS** of New York, Mr. **TORRES**, Mr. **MILLER** of California, Mr. **SMITH** of Florida, Mr. **MARTINEZ**, Mr. **ATKINS**, Mr. **BEILENSON**, Mr. **JACOBS**, Mr. **MARKEY**, Mr. **LANTOS**, Mr. **PEPPER**, Mr. **BERMAN**, and Mr. **DORNAN** of California) introduced the following bill; which was referred to the Committee on Agriculture

---

A BILL

To prohibit certain practices in the raising of calves for veal, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Veal Calf Protection Act".

SEC. 2. FINDINGS.

The Congress finds and declares that—

(1) it is the public policy of the United States to avoid cruelty to animals;

(2) the frequent method of confining calves for life in small crates to produce veal causes unnecessary physical restrictions resulting in behavioral deprivation and impaired health;

(3) the frequent practice of feeding calves a diet deficient in solid food and iron to produce formula-fed veal causes the animals to become anemic and to suffer from digestive and other health problems;

(4) all animals and products derived therefrom subject to regulation under this Act are in interstate or foreign commerce or substantially affect such commerce; and

(5) regulation under this Act by the Secretary of Agriculture is appropriate to prevent and eliminate burdens upon commerce and to effectively regulate commerce.

SEC. 3. PROHIBITIONS.

(a) KEEPING AND FEEDING CALVES.—It is unlawful for a person who raises a calf used for the production of veal to knowingly—

(1) keep any such calf in a primary enclosure—

(A) of which the smallest dimension is less than the length of the calf, measured from the tip of its nose to the base of its tail, plus 6 inches; or

(B) which prevents the calf from having an appropriate amount of physical contact with other members of the same species under rules published by the Secretary of Agriculture; or

(2) feed any calf food which does not meet the standards established by the Secretary of Agriculture under section 4.

(b) TRANSPORTATION.—It is unlawful for a person to knowingly transport, sell, or purchase a calf which was kept or fed in violation of subsection (a).

(c) INSPECTIONS.—It is unlawful for a person to fail or refuse to allow the Secretary or his representative to make reasonable inspections as provided for in section 5(c).

SEC. 4. RULES.

(a) IN GENERAL.—The Secretary of Agriculture shall issue rules to carry out this Act not later than the effective date of the prohibitions in section 3.

(b) CONTENT OF RULES.—Rules issued under this section—

(1) shall establish standards for the content of food for a calf that provide for a sufficient supply of palata-

ble and digestible solid food and iron to maintain the calf in good health;

(2) in establishing such standards, take into account the calf-feed guidelines established by the National Research Council for the production of healthy, nonanemic dairy calves;

(3) may provide for training and other educational programs for persons engaged in raising, keeping, transporting, selling, or purchasing calves regarding appropriate methods for raising calves for the production of veal; and

(4) may include such other provisions as the Secretary deems necessary to effectuate the purposes of this Act.

SEC. 5. ENFORCEMENT.

(a) Civil Penalty.—(1) Any person who violates section 3 or any rules prescribed under section 4, shall be liable to the United States for a civil penalty of not more than $3,000 for each violation. No penalty shall be assessed unless such person is given notice and opportunity for a hearing before the Secretary of Agriculture with respect to such violation. The amount of such civil penalty shall be assessed by the Secretary by written order. In determining the amount of such penalty, the Secretary shall take into account all factors relevant to such determination, including the nature, circumstances, extent, and gravity of the prohibited conduct and, with respect to the person found to have engaged in such conduct, the degree of culpability, any history of prior offenses, ability to pay, effect on ability to continue to do business, and such other matters as justice may require.

(2) Any person against whom a violation is found and a civil penalty assessed under subsection (a) may obtain review in the court of appeals of the United States for the circuit in which such person resides or has his place of business or in the United States Court of Appeals for the District of Columbia Circuit by filing a notice of appeal in such court within thirty days from the date of such order and by simultaneously sending a copy of such notice by certified mail to the Secretary. The Secretary shall promptly file in such court a certified copy of the record upon which such violation was found and such penalty assessed. The findings of the Secretary shall be set aside if found to be unsupported by substantial evidence.

(3) If any person fails to pay an assessment of a civil penalty after it has become a final and unappealable order, or after the appropriate court of appeals has entered final judgment in favor of the Secretary, the Secretary shall refer the matter to the Attorney General, who shall recover the amount assessed in any appropriate district court of the United States. In such action, the validity and appropriate-

ness of the final order imposing the civil penalty shall not be subject to review.

(4) The Secretary may, in the Secretary's discretion, compromise, modify, or remit, with or without conditions, any civil penalty assessed under this subsection.

(b) INSPECTION AUTHORITY.—For purposes of enforcement of this Act (including any rule prescribed under section 4), the Secretary, or any representative of the Secretary duly designated by the Secretary, may inspect any facility where calves are kept for the production of veal, any calf sale, auction, and any calf at such facility, sale, or auction. Such inspection shall be commenced and completed with reasonable promptness and shall be conducted within reasonable limits and in a reasonable manner.

SEC. 6. DEFINITIONS.

As used in this Act—

(1) the term "calf" means the offspring of a cow if such offspring is less than ninth months old;

(2) the term "veal" means the meat and organs derived from a calf;

(3) the term "enclosure" means a crate, stall, pen, or other device used to confine or house a calf for purposes other than transportation or inoculation or quarantine and treatment for diseases; and

(4) the term "Secretary" means the Secretary of Agriculture.

SEC. 7. EFFECTIVE DATE.

The prohibitions in section 3 and the rules prescribed under section 4 shall take effect two years after the date of the enactment of this Act.

SEC. 8. PREEMPTION.

No provision of this Act shall be construed as indicating an intent on the part of the Congress to occupy the field in which such provision operates to the exclusion of the law of any State on the same subject matter, unless there is a direct and positive conflict between such provision and the law of the State so that the two cannot be reconciled or consistently stand together. Nor shall any provision of this Act be construed to exclude the Federal Government from enforcing this Act within any State, whether or not such State has enacted legislation on the same subject, it being the intent of the Congress to establish concurrent jurisdiction with the States over such subject matter. In no case shall any such State take any action pursuant to this section involving a violation of any such law of that State which would preclude the United States from enforcing this Act against any person.

○

DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20250

July 20 19[illegible]

Honorable E (Kika) de la Garza
Chairman, Committee on Agriculture
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This is in response to your request for a report on H.R. 84, a bill "To prohibit certain practices in the raising of calves for veal, and for other purposes."

This Department opposes enactment of this bill.

H.R. 84 would make it unlawful for any person who raises a calf (less than 9 months old) for veal to knowingly keep the calf in a primary enclosure that does not meet specified dimensions; or prevents the calf from having an appropriate amount of physical contact with other members of the same species; or to knowingly feed a calf food which does not meet the standards established under the Act by the Secretary of Agriculture; or transport, sell, or purchase a calf which was kept or fed in violation of the Act or standards established under the Act; or to fail or refuse to allow the Secretary or the Secretary's representative to make reasonable inspections of any facility where calves are kept for the production of veal, any calf sale or auction, and inspections of any calf at such facility, sale, or auction.

The bill directs the Secretary to issue rules to carry out the Act, and authorizes rules on training and other education programs in appropriate methods for raising calves for veal for persons engaged in raising, keeping, transporting, selling, or purchasing calves.

Further, the bill directs the Secretary, by written order, to assess a civil penalty of not more than $3,000 for each violation of the Act or any rule prescribed under the Act, after notice and opportunity for a hearing; allows any person against whom a violation is found and a civil penalty assessed to appeal the Secretary's order to the Federal courts; directs the Secretary, after the appeal procedure is exhausted, or after final judgment in favor of the Secretary, to refer any failure to pay such a penalty to the Attorney General for collection.

In addition, the bill spells out the conditions under which the provisions of the Act would preempt State law on the same subject matter; specifies that it is the intent of Congress to establish Federal-State concurrent jurisdiction within any State, whether or not there is State law on the same subject matter; and prohibits a State from taking any action involving a violation of State law that would preclude the Federal Government from enforcing the Act against any person.

We believe that the language of the bill which directs the Secretary of Agriculture to issue rules on raising calves for veal is an unnecessary expansion of Federal regulatory authority. We have research programs both completed and currently being conducted to achieve the objectives of the bill. Agricultural Research Service (ARS) scientists are continually conducting research on ways to identify and quantify stress in farm animals. Research findings help us to recommend changes in facilities and management practices to enhance the well-being of farm animals. The USDA Extension Service, using the findings, provides educational programs for veal producers and marketers on best management practices, taking into account geographic and environmental variations. These practices are designed to optimize animal health, food safety and humane treatment. We believe these activities already are achieving many of the objectives of the bill. Therefore, we do not believe legislative action is necessary.

Any estimate of a dollar amount of the cost of enacting this legislation would be speculative. However, if enacted, the legislation would require an increase in staff workload for the development and promulgation of rules to carry out the legislation, and additional costs would be required to train personnel for enforcement of such rules. The total cost would also depend on the number and complexity of enforcement actions.

The Office of Management and Budget advises there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely,

Clayton Yeutter

Clayton Yeutter
Secretary

Mr. **Stenholm**. At this point, I would like to recognize my distinguished colleague and chairman of the House Agriculture Subcommittee on Department Operations, Research, and Foreign Agriculture, Mr. Brown of California.

OPENING STATEMENT OF HON. GEORGE E. BROWN, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. **Brown**. Thank you very much, Mr. Stenholm, and thank you for inviting our subcommittee to participate in today's hearing.

Even though this legislation was not referred to our subcommittee, we continue to be deeply involved in issues concerning the humane treatment of animals. This bill deals with a very controversial issue, one which has prompted legislative activity at the State level as well and will continue to prompt such activity.

I have heard much more about the subject of H.R. 84, but we still need to learn a great deal, as I am sure we all recognize, about the public attitudes and the issues which have prompted the concern which we have all had expressed to us. I look forward to today's hearings as an opportunity to explore this topic and I would just like to add one additional word.

I have been concerned about issues of the treatment of animals, both farm animals, laboratory animals, wild animals, for about at least the last 30 years. In all cases, I think what we have done is respond to a changing public attitude about the importance of the humane treatment of animals.

I will say also, that in every case, I think that we have justified the actions that we have taken in terms of economic benefit, as well as moral benefit, and that I expect that this attitude will continue, even with regard to such items as the humane slaughter of animals. I think we have found over and over again that the proper treatment of the animal produces an economic benefit.

I suspect that that attitude will continue to imbue a great deal of what this committee does. I am hoping that we can find a proper course which will reflect both the rising public concern and the welfare, the economic welfare, of those who produce animals in this country.

Thank you, Mr. Chairman.

Mr. **Stenholm**. Mr. Campbell.

OPENING STATEMENT OF HON. BEN NIGHTHORSE CAMPBELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Mr. **Campbell**. Thank you, Mr. Chairman.

In reading the volumes of testimony, I can see that there is no consensus of opinion on this issue and I appreciate you calling this to the attention of our committee and holding this hearing. It is not often we need police standing by for our hearings, so I know it is a very emotional issue.

As a fellow rancher, a person who also raises livestock, like you do, I am interested in finding if the problems that we are facing are really an agriculturalwide problem, as indicated in some of those terrible photos that we see in some of the national magazines now or, in fact, if it is instances of isolated animals, things that can be corrected through existing law or through existing regulations within the Agriculture Department.

But certainly I think, people are much more aware and concerned now about animal welfare. If nothing else, I would hope that this hearing will give us a little better definition about what is now being termed as animal rights and whether we need to proceed to enforce so-called animal rights, or in fact, if there is a conflict of definition between animal rights and animal welfare.

In any event, I appreciate you sponsoring this hearing, Mr. Chairman.

Mr. **Stenholm**. Mr. Jontz.

Mr. **Jontz**. Mr. Chairman, I may submit a statement for the record and, out of consideration of the number of witnesses we have, let it go at that. I do want to thank both of the chairmen for scheduling the hearing and I look forward to the statements of our witnesses today.

Mr. **Stenholm**. Without objection, if you or any other member of these subcommittees submits a statement, it will be made a part of the hearing record.

[The prepared statement of Mr. Marlenee follows:]

STATEMENT OF THE HONORABLE RON MARLENEE

JUNE 6, 1989

FOR THE HEARING ON H. R. 84

I wish to thank Mr. Stenholm, Chairman of the Subcommittee on Livestock, Dairy and Poultry, and Mr. Brown, Chairman of the Subcommittee on Department Operations, Research and Foreign Affairs for holding this hearing and allowing my statement to be inserted in the record.

I feel that it is time to hold this hearing. It is time that the American Veal Association and other livestock producers are given the opportunity to refute and disclaim the allegations and the lies that have been perpetuated about livestock production practices in this country.

As a livestock producer myself, I know the care and attention that is given to animals in the livestock industry. Indeed, producers of livestock are "animal welfarists" in the most honest sense of the word. I find it amazing that the intentions and motives of some of America's finest citizens are being questioned by those who are so far removed from the farm.

It is unfortunate that this issue has been so surrounded by emotionalism--emotionalism created and exploited by some of the animal rights groups looking to advance their cause and fill their checking accounts.

I am confident the Members present today will listen carefully to the testimony presented by the producers appearing before the this hearing and realize that these are people who care deeply for their livestock.

They do not need the intrusion of the Federal Government to tell them how to do the job they are already doing so well.

I thank the Chairmen again, and wish you well at today's hearing.

Mr. **Stenholm**. Mr. Olin.

OPENING STATEMENT OF HON. JIM OLIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA

Mr. **Olin**. Mr. Chairman, thank you.

I want to congratulate both chairmen for having this hearing. I think that this will undoubtedly be one of the more important hearings we have during this session of Congress. I would like to second what the chairman had to say about the role of ranchers and farmers in taking care of their animals.

Obviously, the health of the animal is the primary interest of the grower. It always has been, always will be, but it is worse—it is very important to get this information out to the general public.

I think the use of various chemical substances, for one reason or another, also needs to be widely disseminated so that the general public is well aware of the practices that are used and of—and gains confidence and confirmation that those practices are totally healthful as far as human beings are concerned.

So, Mr. Chairman, I hope to get quite a bit of good information out of this hearing and I hope that the public broadly will as we complete the hearing and consider the legislation of the gentleman from Florida.

Thank you very much.

Mr. **Stenholm**. Mr. Harris.

Mr. **Harris**. No statement, Mr. Chairman.

Mr. **Stenholm**. Before we call our first witness, let me briefly make some important announcements. Due to the lengthy agenda, we would sincerely request that all witnesses summarize their remarks so as to be no longer than 5 minutes in length, with the assurance that all written statements and supporting documents will be made a part of today's hearing record and file. Furthermore, if there is no objection, the hearing record will remain open for 10 days for the purpose of receiving additional and requested written information.

At this time, it is my honor to call our first witness, the honorable Charlie Bennett, a Member of Congress, Third Congressional District of Florida. Welcome, Charlie.

STATEMENT OF HON. CHARLES E. BENNETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. **Bennett**. Thank you very much. I appreciate very much this committee being willing to hear me.

As you may be aware, I originally introduced this legislation after viewing the "Misery on the Menu" series. The inhumane crating of these veal calves for their entire lives and my concern for the health of the ultimate consumer, the American public, led to my decision to introduce legislation to correct unsatisfactory methods of raising veal calves.

I must say, I can not claim to be a farmer. I will say, however, in the Depression years, I earned my keep on farms for the summer months when I was not going to school. When I went to the University of Florida, the most steady paying job I had was 15 cents an hour working on the school farm at the University of Florida in Gainesville, so I am somewhat familiar with agricultural matters. I am certainly not a specialist. My interest in this legislation is in humanity to the calves and for the health of human beings who consume veal.

As I begin my testimony, I want to assure the committee that I am personally not antiveal. In fact, I used to eat veal before I became aware of the terrible conditions existing in the raising of some veal calves, the crated ones particularly. Nor is this legislation antiveal. Quite the contrary, this legislation is proveal and proconsumer.

My legislation continues to allow widespread farming of veal with needed but modest limitations. In fact, the only requirement mandated by the bill is to increase the size of the crate which, by current industry standards, is only 22 inches wide, or about the width of a full-grown calf, so that the crate is at least 6 inches larger in all directions than the length of the calf, measuring from the tip of its nose to the base of its tail.

Though the bill does not provide for it, in recognition of the capital invested in the current crates, I would not oppose a 3-year phasing in period, which I understand is the approximate effective life of the veal crate. That is the only thing that is really mandated in this bill, the size of the crate, and if it needs adjustment for size, why, that is something else we can think about. Certainly allowing them to phase in over a 3-year period seems to be reasonable.

Even some members of the industry agree that raising veal in these tiny crates is inhumane and casts a black eye on the veal industry. I would like to read excerpts from an article authored by Dan Murphy, editor of the Meat Processing magazine, that appeared in the February 1989 issue. Addressing the issue of veal calf confinement, the editor of the Meat Processing magazine states,

> Over the years, veal growers have tap-danced around the problem, trying to blame the purveyors, who blame the chefs, who blame the consumers. The fact is, it won't be the end of the world if the public can't dine on so-called "white" veal, produced in part by restricting the movement of the calves in veal crates. Nor will the market for veal be shattered.
>
> Its culinary appeal and nutritional superiority will continue to appeal to legions of customers, no matter what the color of the product. Pink veal tastes exactly the same as white veal. There is no difference. Thus confinement has no validity on the production side.
>
> How do you come out in favor of confinement without sounding like a villain? The answer is you don't. Instead of fighting over whether it is bad or how bad it really is, the entire industry, from grower to end-user, should unite in a public repudiation of the entire concept of confinement.

That is what Dan Murphy said, editor of the Meat Processing magazine.

Contrast that with what Dr. R.G. Warner, with the department of animal science, Cornell, who writes,

> The meat must be white and is found only in a highly anemic calf. While substantial fat on a carcass, low in iron, can be condemned from a human nutritional standpoint, the packer still buys the carcass.

As Dr. Warner points out, confinement is not the only problem with crated veal farms. Most veal raised in small crates are fed diets low in iron, causing anemia, and to offset the effects of anemia and the stress of confinement, the calves are kept on a regiment of antibiotics, drugs which remain in the calf system and ultimately end up digested by human consumers. Veal raised on a diet of milk replacer, without a sufficient supply of palatable and digestible solid food and iron, also do not develop their rumen, which is the first stomach of a calf, thus compounding the drug residue problem. FDA studies show that nonruminating calves will retain illegal drugs for a much longer period than ruminating calves.

My bill addresses the problem by requiring the Secretary of Agriculture to establish standards for calf feed which will allow for natural rumen development. While some drug use may be necessary for sick calves, much like sick children, drug use should be on an individual basis. We should not allow widespread indiscriminate use of drugs on calves any more than we would allow indiscriminate use of drugs on our children.

A recent American Veal Association newsletter claims that "if H.R. 84 passes, veal farmers will be forced out of business." That is simply not true. What it would do, though, is establish standards for the raising of calves to allow the calves to live a less painful, less enfeebled life. It would also ensure that veal consumers are not unknowingly exposing themselves to unacceptable levels of residual drugs.

H.R. 84 will not destroy the veal industry. Veal can be produced humanely and economically and in a way that protects the health of the consumer.

My legislation enjoys widespread public support. I have brought petitions signed by approximately 60,000 people—they are here on the table—expressing their support. My office has been overwhelmed with letters supporting the legislation from districts all over the United States.

I encourage this committee to enact this modest legislation. By doing so, you may very well be saving the industry from itself. Properly raised veal is an enjoyable, healthful food; crated veal is a sore thumb to all agribusiness and has led to consumer boycotts of veal, both because of the small crates and because of the concern over drug residue. Restaurateurs and supermarkets are following suit. If we stop the practice now, we can save the industry.

H.R. 84 is needed by the public and by the industry itself.

[The prepared statement of Mr. Bennett appears at the conclusion of the hearing.]

Mr. BENNETT. I must say that I confined my witnesses to nine at the suggestion of the committee, and I thought I was going to have an even table. I am not asking for more witnesses to testify, but the truth is that I was told last night there are 23 witnesses for the opposition of this bill. I could have got 100 or 1,000 witnesses and I tried to even it.

I think it really should be even, either by hours, or by numbers of witnesses. I think it is kind of unfair to do it otherwise.

Before we ask if we can see this video, I would like to say that I do appreciate the committee being thoughtful with me and kind with me in trying to see that this bill is a bill that has a chance of passage. I am not doing this because of any great interest in my district. I am doing it because I think it is healthful for the American people and because I think it is healthful to the veal industry and because I think it is a humane thing to do.

Those are the motivations that are behind my movement in this. I am not a professional humane person. I am just an ordinary guy and I did, as I say, experience years of my life, not earning money, but working for my keep on farms.

Most of my relatives are farmers, most of the ones I can identify as being related to me, are, in fact, farmers today. They are not doing well; none of them are prospering, but they have been here in this country for hundreds of years as farmers. So I have a great feeling of love and affection for farmers and love and affection for animals, as well.

The farming that I did when I was a youth was a farmer before tractors, at least on those particular farms. It was either a mule or it was a horse and there were buggies, not automobiles. So that is from whence I came in the field of being an agricultural-based guy.

Now, I would like to ask the committee, if it would, to allow this video to be shown. I am not uptight about it, but it is the reason why I introduced the legislation. I think it is about 10 minutes. Is that possible? Could they do that?

Mr. **Stenholm**. If you would like it to be shown, we will be happy to see it. We will recess the committee because we have difficulties with the court reporter regarding this type of submitted material. We will also look at another film that poses the other side of the question at the appropriate time during the hearing. Furthermore, Mr. Bennett, the inference from some to you that this is a stacked hearing is a disappointing statement. I do not believe that everyone has read all of the testimony. I believe that you, Charlie, knowing of your fairness of mind, when you have read the entire statements of all 30 scheduled witnesses, you should see that there is balanced testimony.

In many cases, invitations were extended, but individuals were not able to participate. I believe that you will agree that the submitted testimony is fair and balanced, once you have reviewed all the material.

Mr. **Bennett**. I know you are a fair man, and I know the committee is fair, but I know you are winding up with a hearing which is heavily, as far as witnesses are concerned, from the side of opposition.

That wasn't my fault. I cut mine down. I thought nine witnesses was plenty and that is what I have. You have 26 or something like that. I know you are fair.

Mr. **Stenholm**. We will stand in recess and watch this film.

[Recess taken.]

[Videocassette shown.]

Mr. **Brown**. The subcommittees recess will come to an end and the subcommittees will reconvene.

Charlie, do you wish to make any concluding statement with regard to that?

Mr. **Bennett**. I want to keep it brief, so I have said what I wanted to say.

Mr. **Brown**. All right.

Do any members of the subcommittee desire to ask any questions of Mr. Bennett?

Mr. VOLKMER. I would just like to ask Mr. Bennett one question.

Mr. BROWN. Mr. Volkmer.

Mr. VOLKMER. Charlie, where did you arrive at the dimensions of the size of the calf plus 6 inches? Where did you arrive at that?

Mr. BENNETT. We have talked to people who were in the industry. I don't think there are letters in those letters, but we did ask people—who were in the industry—farmers who farm veal.

Mr. BROWN. Any other questions from any member?

Charlie, I am sure the subcommittees, both of them, would welcome your continued presence here if you wish to remain.

Mr. BENNETT. If I could sit and listen, I would like to do it.

Mr. BROWN. You are more than welcome to.

Mr. BENNETT. Thank you.

Mr. BROWN. May I say that I don't think this legislation could have a more responsible and more respected sponsor than you are.

Mr. BENNETT. Thank you, sir.

Mr. BROWN. The Chair will call the next witness, Dr. Plowman, Administrator of the Agricultural Research Service. Dr. Plowman, I am sure you didn't anticipate getting into something like this quite so early in your career, but you may be called upon to assist in resolving this problem.

STATEMENT OF R.D. PLOWMAN, ADMINISTRATOR, AGRICULTURAL RESEARCH SERVICE, U.S. DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY LEWIS W. SMITH, NATIONAL PROGRAM LEADER FOR ANIMAL NUTRITION ON ARS NATIONAL PROGRAM STAFF; AND JOAN ARNOLDI, DEPUTY ADMINISTRATOR, REGULATORY ENFORCEMENT AND ANIMAL CARE, ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Mr. PLOWMAN. Thank you, Mr. Brown.

Since becoming Administrator of the Agricultural Research Service, I have not had an opportunity to meet with this subcommittee, but I am well aware of your longstanding support for agricultural research and your interest in the activities of ARS.

Today, I have with me Dr. Lew Smith, who is an animal nutritionist in charge of our animal work in the Agricultural Research Service. He is our national program leader.

On this side, Dr. Joan Arnoldi, who is the Deputy Administrator for the Animal and Plant Health Inspection Service.

I would like to submit my testimony for the record, but then just summarize the remarks, if I might.

Mr. BROWN. Without objection, the full statement will appear in the record and you may summarize.

Mr. PLOWMAN. The Department of Agriculture opposes the enactment of the legislation before us today, which is called the Veal Calf Protection Act, and I will discuss that a bit more after I make a few other comments.

First of all, however, I would like to briefly discuss veal production in the United States. Veal calves are generally male offspring from our national dairy herd, and since males have very little use in the way we reproduce dairy cattle in this day and age, most of them are available for other purposes.

In 1987, there were about 3 million veal calves slaughtered and of this number, only about 1 million of those were special-fed veal calves; that is, the center of the kind of controversy that we are seeing today.

In putting that in a little more context in terms of our total beef consumption in the country, in 1987, again, we slaughtered about 36 million cattle. So, this amount of veal calf that are fed in this special way only amounts to about 1 percent of that, or about one-third of the total veal calf production in the country.

In some of the special-fed veal calf production systems, iron intake and the opportunity for movement is restricted for a couple of reasons. One is to reduce the muscle myoglobin which then results in the nice white flesh that is desirable in veal. Now, there is a general perception that calves are purposely made iron-deficient or anemic by this practice, and I would like to tell you that that is generally not true.

The amount of iron that is fed to veal calves is limited so as to cause the light color in the flesh, but not to make them anemic so that they do not perform adequately. I think that is a very clear and important distinction to make.

No farmer in his right mind would make animals anemic on purpose because if he did, those animals would not perform well and they would be more subject to disease and other characteristics. They would not have a fast growth rate; they would not convert feed efficiently and so it would be a very uneconomical thing for a farmer to do.

Research has clearly shown that you can feed an adequate amount of iron in the diet to produce the desirable color of flesh, but not to make the animals anemic.

Research has also shown that raising veal calves in elevated individual stalls reduces disease incidence and increases the survival rate. The biggest cause of animal death in young animals is diarrhea. A major cause is that animals interact with each other, and since many veal calves are brought together from many farms, it is not uncommon that they bring some of the problems with them.

Putting them in individual pens in relatively isolated conditions only make it so that they do not transmit those undesirable characteristics to each other.

Now that is not unlike the situation we also have in raising dairy replacement animals. I would estimate that approximately 80 percent of our dairy replacement animals in this country are raised in rather isolated conditions and sometimes in elevated stalls similar to some that are used in raising veal.

We believe that the bill's language, which directs the Secretary to issue rules on raising calves, is an unnecessary thing to do. While we certainly support the humane treatment of farm animals, the role of the Federal Government is to generate and transfer needed technology to enhance farm management.

Now, we think that there is currently research under way and research that has been completed to point out to farmers how they can raise veal and other calves in an acceptable manner, which will result in less stress than might be portrayed, especially in the film that you have just seen.

Research findings help us to recommend what changes we need in facilities and management practices for the well-being of farm animals. The Extension Service takes this information and provides it to farmers and generally the recommendations are adopted.

In addition to that, guidelines for veal calf production have been developed and are available from the American Veterinary Medical Association and from the American Veal Association. We believe that these activities are already achieving many of the objectives of the bill. Therefore, we do not recommend any legislative action and would oppose the enactment of H.R. 84.

Mr. Chairman, this completes my prepared statement and we would certainly entertain any questions that might be directed to us.

[The prepared statement of Mr. Plowman appears at the conclusion of the hearing.]

Mr. STENHOLM. Mr. Volkmer.

Mr. VOLKMER. What, if any, research is USDA presently sponsoring in regard to just plain animal welfare, let's put it that way?

Mr. PLOWMAN. Since Mr. Smith is here, and he is responsible for that area of work, I would like to ask him to respond.

Mr. L. SMITH. The agency has approximately 15 projects in the area of animal stress that are somewhat related to welfare. The studies range from basic immunological studies on trying to understand how stressers cause physiological changes in animals and thus allowing, then, perhaps, some intervention to prevent this and also will cover all species of livestock, including poultry, swine, cattle, and sheep.

Mr. PLOWMAN. If you would like, we would be willing and able to submit for the record a list of those projects.

Mr. VOLKMER. Yes, I think that would be very worthwhile.

[The information follows:]

Integrated Management of Parasitic Infections

Adaptation of Microprocessors for Optimal Control of Environment to Reduce Poultry Disease Losses

Disease-Environment Interaction in Poultry

Environmental Influences on the Immune Response of the Chicken

Metabolic & Infectious Disease Resistance: Effects of Endocrines & Nutrition

Factors Influencing Host Nutrient Utilization & Pathophysiology of Avain

Mechanism by Which Environmental Stress Inhibits Milk Removal & Synthesis

Control of Salmonellosis in Poultry

Environmental Temperature Stress & Poultry Nutrition

Physiological Responses of Swine to Actual & Simulated Changes in Production Environment

Computer Simulation & Evaluation of Beef Cattle & Sheep Production Systems

Improved Characterization of Meat Animal Responses to Environmental Stressors

Endocrine Regulation of Adrenal, Gastrointestinal & Utero-Ovarian Function in Ruminants

Disease, Nutrition, & Marketing Stress Effects on Feeder Calf Immunity

Mr. **Volkmer**. I have reviewed some of the statements that we are going to hear from witnesses later on. It is apparent to me that there is some in the agricultural scientific community who believe that further research be necessary before we could justifiably implement the provisions of this legislation.

Would you agree with that?

Mr. **Plowman**. I would agree with that. I think we have research going on now and research that has been completed that makes it not necessary to have this bill.

Mr. **Volkmer**. Do we have any idea as to how—in the special-fed veal calf production methodology that is being used as to the numbers of veal calves that are actually lost?

Mr. **Plowman**. That are lost?

Mr. **Volkmer**. Yes, that die or are diseased. Do you have any idea?

Mr. **Plowman**. I don't personally have an estimate of death rate. Do you?

Mr. L. **Smith**. No.

Mr. **Plowman**. I am sorry, we don't have that.

Mr. **Volkmer**. I was just wondering how it may compare with a normal cow/calf operation or any other operation that presently exists in other parts of the livestock industry or with the feeder pig operations and things like that.

I don't know if it is above, beyond, or less or more so than anyplace else. I was just wondering if there have been any studies made on that.

Mr. L. **Smith**. I will try to answer that question partially. I don't have all the information.

A frequently cited figure in the literature for a number of years back is 15- to 20-percent death loss for calves, and I believe that is supposed to represent the total industry of beef and dairy.

I don't know what it is for veal.

Mr. **Volkmer**. Mr. Chairman, thank you very much.

Mr. **Stenholm**. Mr. Plowman, in your opinion, would H.R. 84, as introduced, apply to anyone who raises a calf or veal?

Mr. **Plowman**. Yes. We would have some concern. In reading the bill, it says "To prohibit certain practices in the raising of calves for veal and for other purposes."

Those other purposes could include replacement stock, both in our dairy and our beef herds.

Mr. **Stenholm**. You are saying the bill perhaps would be applicable to anyone who sells, purchases, or transports any calf, regardless of purpose?

Mr. **Plowman**. That is correct.

Mr. **Stenholm**. Would the bill's impact be so broad in defining veal calves that it would or could expansively cover all calves?

Mr. **Plowman**. It could, that is our opinion.

Mr. **Stenholm**. You say only 1 million calves are special fed. What is the approximate value to the U.S. economy of the veal industry?

Mr. L. **Smith**. Assuming that veal is valued at $5 a pound retail, it would be approaching, I believe, $2 billion.

Mr. **Brown**. I am sorry, would you continue?

Mr. L. **Smith**. If you accept my assumption that veal at retail is $5 a pound, there are some 416 million pounds of veal. That would translate to approaching $2 billion.

Mr. **Brown**. I would like to continue with some additional questions on behalf of Chairman Stenholm.

About how many special-fed veal growers are there in the United States today?

Mr. **Plowman**. We don't have an estimate of that number.

Mr. **Brown**. How many ARS research facilities conduct special-fed veal calf research, if any?

Mr. **Plowman**. We are not engaged right now in any research on veal calf production.

Mr. **Brown**. How many ARS scientists have training in evaluating animal well-being and behavior?

Mr. **Plowman**. I would say at least 20.

Mr. **Brown**. These would be from your professional veterinary staff, I presume?

Mr. **Plowman**. Yes, we have a very large contingent of veterinarians and other animal health specialists.

Mr. **Brown**. All right. Mr. Plowman, there are some additional members who will return shortly who, I think, want to ask you some questions also and I am going to try to keep you occupied for a few minutes until they get back, if you don't mind.

Mr. **Plowman**. Be friendly.

Mr. **Brown**. I will be as friendly as possible, yes.

If the Congress were to enact H.R. 84, do you have any estimates of the additional resources that would be required to implement that and do you know whether or not the Department would have such resources in the event that it were passed?

Mr. **Plowman**. If that bill was enacted, then the primary responsibility would go to the APHIS organization, Animal and Plant Health Inspection Service, I can tell you, without hesitation, that they do not have the resources at the present time to do that. I don't know if they have an estimate of the amount of money and manpower that it would take to inspect all of the producers, and especially if this legislation was interpreted to cover the raising of all calves, not only for veal, but for other purposes as so stated. Now we are talking about all the dairy herds in the country, which would be a tremendous, tremendous job.

Mr. **Brown**. We are going to need to refine that information, Mr. Plowman. I think there will be some need for it as we continue.

Mr. **Plowman**. We can supply an estimate of cost for the record.

Mr. **Brown**. You have indicated that it would be administered by APHIS. You have other legislation dealing with animal welfare that possibly might provide the theory for this. Off the top of my head, I don't know how the bill is written, but——

Mr. **Plowman**. The Animal Welfare Act that is now administered by APHIS specifically excluded production animals.

Mr. **Brown**. Yes.

Mr. **Plowman**. So this would have to be a different activity than that.

Mr. **Brown**. I understand that and I understand, also, that APHIS has a very cramped budget already. So I would assume that if the Congress enacted this, it would act to provide the additional resources that were needed and that would be a crucial item of information in any consideration of the bill, both in committee and on the floor.

I would appreciate it if you could review that question and see if you can come up with a little more refined estimate of what you think the cost might be.

Mr. PLOWMAN. We will be pleased to do that.

[The information follows:]

FIRST YEAR COSTS OF IMPLEMENTING H.R. 84

Total personnel compensation	$1,948,650
Personnel benefits (28%)	$545,622
Benefits for former personnel	$0
Travel/transport. for persons	$190,968
Transportation for things	$38,973
Relocation costs	$455,600
Rent, communication, & util.	$205,583
Printing and reproduction	$7,015
Other services	$324,547
Supplies and materials	$99,381
Equipment	$152,873
Land and structures	$3,898
Grants, etc.,	$974
Insurance claims & indemnities	$974
Interest and dividends	$0
Training (1 week session)	$48,749
Alleged-violation investigation (15%)	$1,044,679
Total start-up costs	$5,068,486

These figures were developed on the basis of veal industry estimates that there are 1,500 to 1,800 veal calf producers in the United States. Annual costs after the first year would be slightly less because relocation and transportation costs would decrease after the first year.

Mr. BROWN. Now, there was one point that was brought up here during the course of the video or earlier testimony—I am not sure which—with regard to the relative cost of the veal produced in the special-fed program, in the crates, and veal produced under other circumstances, and I gather that the special-fed veal is more expensive to produce.

Can you give us some information on that? Is it more expensive to produce and how much more expensive if so?

Mr. L. SMITH. I will attempt to answer your question, but I probably am not going to be able to use any specific numbers.

The quality of the diet for the special-fed veal is much higher than the diet that would be used for other kinds of veal production. We are dealing with extremely good quality protein in a combination of milk and milk replacer, with usually some sort of a finely emulsified fat addition, and that diet would definitely be more expensive than a calf starter or grower-type diet that would be used for a nonliquid-fed veal.

Now, the exact figures on that, I wouldn't have. What gets into the issue is the rate of gain and then also the value of the product that is produced. I don't have those relative figures either.

Mr. BROWN. The question of the economics here, again, is an important question. Obviously, the cost of producing the special-fed veal is likely to be greater. The cost of the antibiotics is probably greater. What I would like to have you do is, if possible, quantify some of these figures for us because we might as well debate on the issue with as many facts as possible, rather than on guesswork.

Mr. PLOWMAN. We will supply that.

Mr. BROWN. Could you supply that for the record? You may have to have a researcher on this, Mr. Plowman, before you are through.

[The information follows:]

The Economic Research Service of the U. S. Department of Agriculture costs of production surveys do not include estimates of the costs and returns for U.S. veal production. Veal production is a minor commodity for which limited statistical information is available. A private study on veal production costs by the Pennsylvania State University has been funded by the National Livestock and Meat Board. The study, not yet released, includes costs and returns for fed veal based on actual survey and interviews of the U.S. veal producers by size of operation and type of feeding.

In 1987, an economic analysis of veal production potential in North Florida was conducted and reported by R. L. Degner, J. D. Locascio and W. M. Odegaard. Table 2, entitled "North Florida veal producer budget", summarizes cash costs, receipts and economic summary for a 108 head barn cycled three times annually. The authors conclude from actual price variations and production parameters that under the worst possible scenario growers could lose substantial money. Returns are sizeable when all goes well, and that the key to success is management with control of mortality and high feed conversion rates. Veal production has the potential to provide the dedicated, skillful manager relatively high profit but requires constant attention.

Table 2.—North Florida veal production budget.

Item	Unit	Number	Price	Grade-out	Value
Cast Costs					
Barn capacity	head	108			
Group/year		3			
Bob calves	head	324	$ 45.00		$ 14,580.00
Purchase fee	head	324	3.00		972.00
Feed (476 lbs./head)	tons	77	852.00		65,604.00
Vet., medicine	head	324	10.00		3,240.00
Utilities	head	324	4.00		1,296.00
Repairs, supplies	head	324	4.00		1,296.00
Labor (4 hrs./day)		1,344	4.75		6,384.00
Hauling to market	head	300	3.00		900.00
Rental equipment, cleaner		3	70.00		210.00
Property & liability insurance					684.00
Interest on operating capital[a]		12.5			
Operating capital		95,166			3,961.28
Total cash costs					$ 99,127.28
Receipts					
Carcass weight	pounds	245			
Death loss	percent	5.25			
Cull rate	percent	5.25			
Veal calves sold	head	290			
Regular	percent	5			
Downgrade	percent	10			
Veal No. 1	pounds	60,388	1.60	85%	$ 96,661.34
Veal regular	pounds	3,552	1.50	5%	5,328.38
Veal downgrade	pounds	7,105	1.30	10%	9,235.86
Cull calves	head	17	35.00		595.35
Total receipts					$111,780.93
Economic Summary					
Returns over cash costs					$ 12,653.65
Less debt payment					
Amount	$38,065				
Interest	14				
Years	20				
Returns to management					$ 6,906.36

[a] Interest is based on 1/3 operating capital.

Source: Adapted from work by Dr. Lane Ely, University of Georgia.

Reported in: An Economic Analysis of Veal Production in North Florida. A Report by: R. L. Degner, J. D. Locascio and W. M. Odegaard. July 1987. The Florida Aquacultural Market Research Center, University of Florida, Gainesville, FL 32611.

Mr. **Brown**. I am going to recognize Mr. Olin at this point, if I may.

Mr. **Olin**. Thank you, Mr. Chairman.

I wanted to ask Mr. Plowman, or perhaps one of the other experts, if you could talk a little bit about the allegation that has been made that these calves are filled up with chemicals or drugs of one type or another and that the residues of those drugs pass on, to some extent, to the consumer, an undesirable extent, and that there isn't enough testing by the USDA to properly control that aspect.

Mr. **Plowman**. Mr. Norcross, a veterinarian with the Food Safety and Inspection Service, is here and perhaps he could answer that question.

Mr. **Olin**. I think it would be appropriate if he did.

Mr. **Plowman**. Where is he? He is either hiding or he is out in the hall. This is such a popular place, he couldn't get in.

Mr. **Olin**. We can make room for him.

While we are waiting for him, could any of you make some comments on the types of chemicals that are involved here that are widely used, either broadly or in the case of special-fed animals, chemicals or drugs that are used that people are objecting to?

Mr. **Plowman**. In many aspects of raising beef cattle, it is not uncommon to feed small doses, not therapeutic doses, but small doses of antibiotics. These have been looked at very carefully by the Food and Drug Administration and proper procedures have been developed so that they pose no problems in the food supply and only help the animal maintain its good health, and therefore, make efficient weight gains.

Mr. **Olin**. What is the nature of the control in the antibiotics that protects the consumer?

Mr. **Plowman**. Would you like to take that one?

Ms. **Arnoldi**. As far as control, I don't believe there are a great number of controls. The producer can purchase those antibiotics or those chemicals.

Mr. **Olin**. Is there an unsatisfactory residue at some level or does that not occur?

Ms. **Arnoldi**. I am sure it does occur. What that level is, I couldn't answer.

Mr. **Olin**. Do you know if the USDA testing would pick that up?

Mr. **Plowman**. Yes. Mr. Norcross—I was just visiting with him prior to this meeting, and he was telling me of the activity that they now have under way in testing veal calves for residues.

Rather than me make some guesses about that, I would like to get those facts for you and supply it for the record.

Mr. **Olin**. I think that would be good information. I think this subject broadly is one of the major issues as to whether there are excessive chemicals used from the point of view that the residues continue into the product that reaches the consumer.

Mr. **Plowman**. They have good information on that and we will supply that for you.

[The information appears on page 54.]

Mr. **Olin**. If you could also supply information with regard to the adequacy of the sample testing that is done by USDA.

Mr. **Plowman**. We will do that.

[The information appears on page 57.]

Mr. **Olin**. Mr. Chairman, I would hope that we could receive the information with regard to the subject of chemicals from the Department and put it in the record.

Mr. **Stenholm**. That shall be done.

Have you completed, Mr. Olin?

Mr. **Olin**. Yes, sir.

Mr. **Stenholm**. Mr. Rose.

Mr. **Rose**. Mr. Chairman, I would like to ask why was Dr. Plowman invited here to testify? I mean, what does his organization have to do with veal production? Mr. Olin has just asked a very, very important question about potential residues in veal, which everybody, and certainly the staff of the committee on both sides of the aisle should have known was a very pertinent question, and there is nobody here from USDA to answer those questions.

Mr. **Stenholm**. I would be happy to answer. We extended the invitation to the Secretary of Agriculture to appear before this hearing. He designated Dr. Plowman to appear on his behalf.

Mr. **Rose**. OK. Dr. Plowman, I have no disrespect for you, but the head of a water district in northern Montana might as well have come here to respond.

Are you aware of the residue problem that was laid out in this film?

Mr. **Plowman**. I am sorry, sir, I didn't see the film.

Mr. **Rose**. You heard it. Weren't you here and didn't you hear them talking about——

Mr. **Plowman**. We couldn't hear the film from sitting here.

Mr. **Rose**. All right. The film stated that in 1985, there were 1.7 million veal carcasses slaughtered in this country and that only 1,100 of them were checked. That is Greek to you, isn't it, you don't have any knowledge about figures like that, do you?

Mr. **Plowman**. No, I have no knowledge.

Mr. **Rose**. All right.

Why did you bring these two people with you today? What were they supposed to testify about as to veal production?

Mr. **Plowman**. Dr. Smith has knowledge about the feeding practices and the practices of raising veal calves.

Mr. **Rose**. Then, Dr. Smith, you know what kind of things are fed to them, don't you?

Mr. **L. Smith**. Well, yes and no. I don't know really what the producers are on a daily basis feeding their calves, but generally I would know about what nutrients are required for veal production.

Mr. **Rose**. One of the whole problem areas here is that veal in the dark—and Mr. Plowman, in your statement, you say, "Relative isolation of calves in individual stalls with slotted floors is beneficial in minimizing calf-to-calf contact and cross-infection leading to diarrheal diseases."

In the film that we saw several veal operations, there is no semi-isolation. I would certainly hate to be that close to you if you had chickenpox or anything else contagious and I am quite sure that there is no isolation.

Mr. Smith, do you agree with that statement, that putting calves side by side in 22-inch stalls is isolation, so far as contagions of various types are concerned?

Mr. L. SMITH. It minimizes head contact and completely eliminates head-to-tail contact. That is the objective.

Mr. ROSE. Dr. Arnoldi, why did you come here today? What were you going to tell us about veal?

Ms. ARNOLDI. I am here from the Animal and Plant Health Inspection Service to answer questions relative to the inspection process if those came up.

Mr. ROSE. All right. So you could answer my question, then.

In 1985, this film said 1.7 million carcasses were slaughtered and 1,100 were checked. Does that sound about right to you?

Ms. ARNOLDI. That is talking about the inspection of carcasses, sir, I am talking about the inspection of the animals, live animals.

Mr. ROSE. Tell me what you know about the inspection of live veal animals.

Ms. ARNOLDI. To date, that hasn't been done. We are talking about a proposal in this bill whereby APHIS might be required or requested to inspect the live veal calf.

Mr. ROSE. Are you in charge of inforcing the Animal Welfare Act?

Ms. ARNOLDI. Yes, sir.

Mr. ROSE. No further questions. Thank you.

Mr. OLIN. Mr. Chairman.

Mr. STENHOLM. Mr. Olin.

Mr. OLIN. I would like to make an observation here along the lines that Mr. Rose has been proceeding on.

I would say that we really have not had adequate testimony from the Department on this subject and it doesn't look like we are going to get it from this particular group of people. Our hearing will be incomplete without——

Mr. ROSE. I agree.

Mr. OLIN. I would like to suggest, Mr. Chairman, that either we make an attempt to get some more knowledgeable people down here today and that, before we close the hearing out, we accomplish that subject as part of this hearing. Otherwise, we are not going to be able to get into these areas that represent at least half of the major issue.

Mr. STENHOLM. Mr. Plowman, I was under the impression that you had with you a veterinarian from the Food Safety and Inspection Service. That is not correct?

Mr. PLOWMAN. We had him here before the hearing, but he is coming back—I was just informed.

Mr. STENHOLM. Do we know when he might be coming back?

We will call the next panel at this time. When he comes back, we will pursue the questions that have been posed.

We will next call panel three. Dr. Curtis, Dr. Friend, Dr. Saville, and Dr. McGlone. First we will hear from Dr. Stanley Curtis, professor, department of animal science, University of Illinois, Urbana, Illinois.

STATEMENT OF STANLEY E. CURTIS, PROFESSOR, DEPARTMENT OF ANIMAL SCIENCE, UNIVERSITY OF ILLINOIS

Mr. CURTIS. Mr. Chairman, thank you for the invitation to comment on H.R. 84. As an animal scientist specializing in environmental physiology and behavior, I recommend that H.R. 84 not be passed into law. If everyone, based on their respective personal perceptions, opinions, and emotions, had a say as to how agricultural animals are managed, producers would be receiving more noise than signal, and chaos would ensue in the animal industries.

Moreover, food production is too critical to the health of our people and the security of our nation to be put in the hands of those who would politicize the issue of farm animal welfare for the purpose of regulating animal care practices on farms, ranches, and elsewhere to suit their personal prejudices.

Our course in these important matters must, instead, be founded on scientific principles and facts. With specific reference to the bill before us, it is my opinion that these bases in scientific principles and facts are today lacking.

The last decade has seen an agricultural awakening and the setting of a general framework for the evolution of production technologies—based on scientific principles and facts—that would ensure that the animal's needs were being accommodated. But at this time, in no way are we able to discriminate precisely enough among the various levels of overall animal well-being engendered by different production practices and systems to be justified in outlawing some of the practices and systems used in the raising of calves for veal, upon which this bill focuses.

Frankly, I am alarmed by the potential for actual harm to the animals that might result from some of the well-intentioned but naive laws and regulations relative to husbandry practices that are being proposed. Sooner or later—in the interest of the animals, to say the least—naivete in these matters will have to be supplanted by knowledge, which can come only from scientific research.

Prominent British animal scientist, Colin Spedding, has said,

> Perhaps the biggest danger is that a dissatisfied public may demand changes that eliminate what is disliked, but that result in either no improvement or even a reduction in the welfare of the animals involved.

The fact that some nations in Western Europe have already enacted legislation similar to that proposed here makes little impression on me. The political processes in regard to farm animal welfare issues there have been going on for quite some time without the benefit of adequate science, in my opinion.

The following are point specific to H.R. 84; general background points have been made in the written testimony, which I have submitted.

First, there is no conclusive scientific evidence that veal calves residing in crates typical of the U.S. veal industry are being deprived of behavioral needs. In fact, no behavioral need has been scientifically established for veal calves or any other animal.

Second, there is no evidence, either scientific or empirical, to support any statement that veal calves residing in crates typical of the U.S. veal industry experience impaired health due to physical restrictions.

Third, clinical diagnosis of anemia should be made on the basis not only of absolute hemotologic values, but on the basis of the needs of the animal as well.

Fourth, with regard to making the enclosures for veal calves the length of the calf plus 6 inches, this is an example of law potentially decreasing the welfare of the animal.

I ask, has anyone ever observed the behavior of a calf in an enclosure as prescribed here? It is quite possible that providing this much space would, indeed, encourage the calf to attempt to turn around, but that this much space would not fulfill the calf's dynamic space requirement during turning.

Fifth, this is based on empiricism and professional judgment, rather than representing design specifications developed from first biological principles.

Finally, it would be unfortunate if it were concluded that, because it has been and is now inadequate for the task, science should be abandoned in this matter. There is a chance in the case of this bill to do as much harm as good to calves being raised for veal.

The two subcommittees here are the most likely bodies to initiate new support for scientific research that is utterly essential if we are to learn enough about farm animal welfare for agriculture and other elements of society working together to strike the inevitable compromises and draw the lines that are necessary. Political solutions to these real questions that might be made in the absence of this critical knowledge would, I am afraid, have as much chance of reducing animal welfare as enhancing it.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Curtis appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mr. Curtis.

Next, Dr. Ted Friend, associate professor, department of animal science, Texas A&M University.

STATEMENT OF TED FRIEND, ASSOCIATE PROFESSOR, DEPARTMENT OF ANIMAL SCIENCE, TEXAS A&M UNIVERSITY

Mr. **Friend**. Good morning, Representatives. I am Dr. Ted Friend, from the department of animal science at Texas A&M University.

I am a native of New York State, receiving my bachelor's degree from Cornell University and my master's and doctorate degrees from Virginia Tech, majoring in dairy science.

I was employed by the Virginia Extension Service to evaluate calf-rearing systems in Virginia before moving to Texas 10 years ago. I have also raised veal calves commercially.

I have been asked to inform you of the results of our research on calf housing and how it relates to current practices in agriculture.

In 1982, the USDA funded 13 animal care studies on livestock production systems. Our studies determine the effects of maintaining calves under varying degrees of confinement. Our research team consisted of Dr. Gisela Dellmeier, a research scientist at Texas A&M; and Dr. Edward Gbur, who is presently head of the agricultural statistics laboratory at the University of Arkansas.

The results of this research have been published in two scientific articles in the Journal of Animal Science in 1985, and one scientific article in the Journal of Dairy Science in 1987. The articles had to pass a rigorous scientific peer review of their soundness conducted by the respective journals prior to their publication.

We raised Holstein bull calves—typical veal-type calves—in conditions of varying confinement ranging from crates, in which they could not turn around, to groups on small pastures. Each calf's hormones, adrenal gland function, immune system, blood chemistry profile, health, and behavior were determined.

Our results show that calves have a very strong drive to move or exercise that is blocked by chronic close confinement. The studies also found that maintaining calves in close confinement causes adverse physiological effects that alter metabolism and reduce the ability of the calf's immune system to respond to disease. All of these are changes in the body that are indicative of chronic stress.

The crated calves required approximately five times more medication than those in the less confining environments.

We also found that all of the symptoms of chronic stress were eliminated after the calves were removed from the crates.

These findings are consistent with studies conducted by such internationally recognized scientists as Robert Dantzer, at the University of Bordeaux, in France, and John Webster and Claire Saville, University of Bristol, in England.

Our results were also consistent with common practices on dairy farms. Calves raised on dairy farms usually receive little, if any, antibiotics, whereas veal calf formulas must be heavily medicated, if not by the feed company, then by the individual veal producers.

Also, I know of no State dairy extension specialist who recommends that calves raised on dairy farms for herd replacements be raised in crates similar to milk-fed veal. The rate of illness is just simply too high.

For example, take the University of California's extension leaflet No. 2327, entitled "Modified Elevated Calf Pens." It was written in 1982 and is still being distributed. It says that there is little doubt that crates place more stress on a calf than does a roomier pen. The leaflet simply requests that calves be allowed, "more room and the use of a comfortably bedded area. This, greatly enhanced the chances for calf livability in the elevated slotted floor type pen."

To summarize, our studies found that maintaining calves in crates is physically detrimental to the calf, something that is common knowledge in the industry. These findings were funded by the USDA, passed a rigorous USDA and scientific review, have been published in the most reputable journals in the world and, last, these results from carefully controlled scientific studies were congruent with common animal husbandry wisdom and other related studies.

In fact, the only people who have criticized this work are those working directly with the rapidly dwindling portion of the veal industry that still insists on using an outdated means of production.

This completes my statement. Thank you very much.

[The prepared statement of Mr. Friend appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Friend.

Next, Dr. Claire Saville, Motcombe Farm, Ashwicke, England.

STATEMENT OF CLAIRE SAVILLE, MOTCOMBE FARM, ASHWICKE, ENGLAND

Ms. SAVILLE. Mr. Chairman, I am Dr. Claire Saville, from England. I have a BS degree in animal science and for my Ph.D. degree at the University at Bristol, I studied the behavior of calves raised in different systems of husbandry, plus aspects of veal production.

Over the past 11 years, I have been involved, together with other scientists, including Professor Webster, in research concerning farm animal welfare. Our work with calves has been published and has provided a factual background for legislation in the United Kingdom and Europe.

In testifying today, I would like first to mention the general principles on which we base legislation in the United Kingdom and then to look at five main requirements for veal calf welfare.

The preface to the United Kingdom codes of recommendations for the welfare of livestock begins:

> The basic requirements for the welfare of livestock are a husbandry system appropriate to the health and, so far as practicable, the behavioural needs of the animals and a high standard of stockmanship.

In starting to define these requirements, my colleagues and I consider at the least a calf should be allowed five fundamental freedoms. These are freedom from, one, hunger and malnutrition; two, thermal and physical discomfort; three, injury and disease; four, fear; and five, the freedom to express most normal patterns of behavior.

Research work has identified abuses to each of these five freedoms in crated veal production systems. In general terms, we support H.R. 84 as it seeks to reduce many of these abuses.

I will now consider in more detail some of the violations of these five freedoms.

Cattle have four stomachs, rather than one, as found in humans. These allow them to digest large quantities of herbage. Depriving calves of solid feed not only arrests development of their normal digestive system, but also prevents a normal pattern of oral behavior. The formation of hairballs, indigestion, and diarrhea are common.

The notion that veal meat should be white or pale has arisen from a quirk of nature. Cow's milk is normally deficient in iron, but calves would normally graze to make up this deficiency. Having developed the science and technology to recognize, treat, and prevent anemia with supplemental soluble iron, should we not also develop an enlightened attitude rather than unthinkingly accepting our peasant heritage? I know of no evidence that providing adequate levels of iron in the feed of calves affects the taste of veal meat.

A veal calf grows phenomenally fast. At similar body weights to an average adult human, it may be gaining 7 pounds per day. This generates a lot of excess body heat, so to be thermally comfortable, the calf should be in a well-ventilated environment that is not overcrowded. An efficient posture for calves to lose heat is to lie with limbs outstretched on their side. Our behavioral observations have shown that suckler calves and loose-housed veal calves spend about 65 percent of the 24-hour day lying down and more than 5 percent of this time lying out flat.

One of our studies in six commercial crated veal units showed 1 in 5 calves to have knee injuries, of which 3 percent were deemed serious enough to require treatment.

Calves confined in crates less than 26 inches wide, after about 10 weeks, no longer have sufficient space to adopt their most common posture, that is, sleeping with their heads tucked round into their flanks. Most oral activity of crated veal calves given only a liquid diet appears purposeless. Their social contact and play behavior is very limited. They are unable to groom themselves or each other fully, something that is important to their health and well-being.

In conclusion, our research, and that of other calf experts, demonstrates that crated veal is not a system of husbandry appropriate to the health and behavioral needs of calves.

[The prepared statement of Ms. Saville appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Ms. Saville. Next, Dr. John McGlone, associate professor, department of animal science, Texas Tech University.

STATEMENT OF JOHN J. McGLONE, ASSOCIATE PROFESSOR, DEPARTMENT OF ANIMAL SCIENCE, TEXAS TECH UNIVERSITY

Mr. McGLONE. Thank you, Mr. Chairman. My name is John McGlone and I am associate professor of animal science at Texas Tech University, Lubbock, Texas. My responsibilities include teaching and conducting research on animal management, animal behavior, and animal stress.

I also presently serve as section editor for the Journal of Animal Science in the environment and behavior section.

I appreciate this opportunity to share with you my opinion on scientific matters regarding proposed legislation designed to improve the well-being of veal calves. Details of the state of scientific knowledge for each major component of the legislation are given in my written testimony.

In this oral presentation, only recommendations will be offered. I encourage interested parties to study the state of scientific knowledge on issues of animal welfare. Our understanding of factors that influence calf well-being are so poorly understood that H.R. 84 may actually harm calves. Therefore, I strongly recommend that H.R. 84 should not be made law.

Animal scientists hope that any legislation is based on sound scientific evidence regarding calf well-being. In the absence of sound scientific evidence, such evidence should be obtained before calves well-being and farmers livelihoods are placed in peril.

For each major component of H.R. 84, the primary question seems to be, will this legislation improve calf well-being? If the answer is "no," or "we are not sure," then this legislation should not be passed. If the answer is "yes," then this legislation should be passed.

The four major components of H.R. 84 relative to calf management are issues of space allowances, social interaction, solid food and iron deficiency anemia. I see little mention, by the way, of issues about antibiotic or drug uses in veal calves in this legislation.

H.R. 84 attempts to provide calves with at least a given amount of space. The space needed for calves to make normal postural adjustments is not known. I recommend not creating laws until the space requirements of calves are better defined by sound scientific investigations.

H.R. 84 proposals to allow calves social interaction. Calves may be worse off in terms of behavioral problems, health and survival, in group housing systems than in individual stalls. Passage of H.R. 84 may increase suffering and illness in calves by forcing them to have greater social interaction. Viable group housing alternatives must first be found that work in the U.S. environments before calves are required to be in social groups.

H.R. 84 will require calves to be given solid food. Because calves grow and remain healthy on either liquid or solid food up to several weeks of age, the degree of moisture in calf feed should not be legislated. Some solid foods cause allergic reactions in calves, and thus, this component of the legislation could harm calves by potentially exposing them to certain foods that they are not able to handle well.

In the absence of complete scientific evidence, any legislation regarding solid or liquid feeds could improve or compromise animal well-being and there is no way to predict the effect of such legislation on calf well-being.

H.R. 84 seeks to avoid anemia in calves. I believe that the level of blood hemoglobin at 16 to 20 weeks of age for calves, calves on typical, special-fed diets, is in the range of borderline anemia. The industry might be encouraged to minimize the time during which calves are in this borderline anemic state; however, there is no evidence that being borderline anemic represents being in a state of poor well-being.

Most authors would agree, on the other hand, that a state of full anemia, which is not the case in special-fed vealers, would represent depressed well-being.

H.R. 84 is so poorly defined on the issue of anemia and the research so inconclusive that H.R. 84, if enacted, relative to the anemia issue, would be meaningless.

Congress may want to outlaw full anemia or Congress may want to outlaw full and borderline anemia. If Congress intends to do either in order to improve calf well-being, it first must have more scientific evidence to determine physiological and behavioral responses among calves with blood levels of hemoglobin between 7 and 11 grams per decaliter.

The theme running through this testimony is the tremendous scarcity of data on issues of animal welfare. Our own USDA funds little work, internally or externally, on direct projects of animal care. I recommend that Congress draft a bill to establish a long-term research effort in farm animal care with internal and external competitive funding dollars authorized to the USDA. Then bills with intentions to improve animal well-being can surface with sound science to back them up.

Thank you, Mr. Chairman.

[The prepared statement of Mr. McGlone appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mr. McGlone.

Dr. Curtis, could you briefly describe the 25-year old Brambell report out of Europe? Is it the last word in farm animal welfare? Is it fair to compare European production and United States production systems point by point when discussing these issues? Perhaps, Dr. Saville, you might comment also on that.

Mr. **Curtis**. The Brambell Report was issued by a committee appointed ad hoc by the British Parliament to inquire into the methods of keeping livestock in intensive husbandry systems. It was issued in approximately 1965–66, something like that, and it was a first attempt to investigate the conditions under which farm animals were reared in the United Kingdom and to make suggestions for how some problems that were perceived by the committee could be alleviated.

As a matter of fact, several members of that committee have said in recent years that the one thing they have learned in the meantime is how little they knew about the situation to begin with. As work has gone on in the United Kingdom, in the intervening two-plus decades, the situation has been revealed to be much more complex than was originally thought and so development of alternative systems that represent true enhancement of animal well-being have been very difficult to come up with.

It is interesting to note that the Brambell Committee, in some respects, made some very specific recommendations and there is a classic case there where they made recommendations with regard to the recommended kind of flooring material to put under chickens and, as it turns out, in the first place, in preference tests, the chickens found that they came in a distant third to some of the more typical flooring materials that are used around the world in the poultry industries. Not only did the chickens not like the Brambell recommended flooring, but it turns out that foot health was impaired by that flooring, too.

This tells us that we cannot sit around in committee rooms and a priori design environments that will necessarily enhance the well-being of animals. We learn how to enhance the well-being of animals only on the basis of scientific research and asking the animals questions that are developed in scientifically controlled ways.

Mr. **Rose** [acting chairman]. Dr. Curtis, tell us about the Brambell Report out of Europe?

Mr. **Curtis**. Mr. Rose, respectfully, I have just answered that question.

Mr. **Rose**. I am sorry. I had that pointed out.

Mr. Friend, as a result of recent research conducted by you and your colleagues, are there noticeable differences detected in a veal calf's performance in a stall versus a pen or crate?

Mr. **Friend**. By "performance," what do you—in regard to what aspect? Those in crates—ours in crates required about five times more antibiotics. The basic growth rate is about the same.

If you go by behavior, there is a huge difference in them.

Mr. **Rose**. How about in weight gain?

Mr. **Friend**. In weight gain? All right, there is basically no difference.

Mr. Rose. All right.

Have you commented—I am sorry, I had to go vote for the next Speaker of the House and I did not hear everything that you had to say on direct—your direct testimony, but what is the difference—what would the difference be, in your opinion, if the bill that we are here to discuss, H.R. 84, the Veal Calf Protection Act, if it was followed, what would the difference be? Would you call that a stall or a pen?

Mr. Friend. What the bill would probably effectively do is cause producers to go to group housing, hopefully small group housing.

Mr. Rose. Right.

Mr. Friend. That would be economically equivalent probably. There are lots of producers out there now who are in group housing and who are doing fine. There are some who tried it and failed, largely due to management problems on their part.

If this passed, they would tend to go to group housing. It would force them to that and——

Mr. Rose. What would, in your opinion, be the negative impact on the veal industry?

Mr. Friend. None.

Mr. Rose. Of group housing?

Mr. Friend. I don't think it would have any. If anything, it might improve it because it has such a terrible image right now. We are trying to sell a product to customers out there, to the public, and once they find out how it is raised, they are just appalled by it.

Mr. Rose. Dr. Curtis, you don't agree with that, do you?

Mr. Curtis. No, I don't.

Mr. Rose. Why? On what do you base your not agreeing with that?

Mr. Curtis. I believe that we——

Mr. Rose. Do you believe because you have done it or you have seen it or you have studied it?

Mr. Curtis. I have seen attempts made to use group systems of rearing veal in large volume veal operations—I am talking about 300 to 400 calves on the farm at a time—and our results along those lines paralleled the results of the Dutch workers 10 and 15 years ahead of those of us in the United States in that the variation in growth rate, which resulted in different ages at which the calves came up to market weight, was so great that it caused marketing problems in terms of the steady flow of animals to market.

If the farmer can bring a group of calves in on a certain date and take them all out on a certain date, it greatly reduces his logistic problems in terms of transportation, and that is a real consideration in the industry.

By the way, variation in growth rate is a clear sign of stress, suggesting that calves raised in group housing systems are under more stress and, for further reference to that notion, I would refer you to work by Dr. Nick Staincommer, an expert in veal calf husbandry in the Netherlands.

Mr. Rose. Dr. Friend, you heard what Dr. Curtis said, but he was talking about 200 or 300 in a unit. Were you talking about that size or were you talking about smaller?

Mr. FRIEND. Yes, that size. Hopefully, they might have 6, 7 or 1,000 animals, but they have them in groups that are manageable, 6, 8, 10, 20, divided up in groups within their buildings.

Mr. ROSE. Dr. Friend, has your reported 1985 calf confinement study been replicated, to your knowledge?

Mr. FRIEND. No, it hasn't.

Mr. ROSE. Was a commercial diet used that was representative in your 1985 study?

Mr. FRIEND. Do you mean a diet representative of what a veal calf would receive? No, there were a number of differences. Our study was geared to look at the importance or the effect of eliminating or not allowing them to move, to exercise. We fed them a normal diet. We didn't feed them an anemic diet. We gave them hay and so forth and our flooring is a little different. We gave them something more comfortable.

There are some differences in there that we tried to do to improve upon the situation.

Mr. ROSE. How many calves were utilized in your study and was any carcass data collected?

Mr. FRIEND. No, we didn't collect any carcass data.

Mr. ROSE. What was the rate of gain for the calves in your study and how does this compare with gains for veal calves fed only milk?

Mr. FRIEND. I don't recall that. I would have to go check. When we did our study, ours were still receiving milk. They were still on milk.

Mr. ROSE. OK.

Mr. FRIEND. But they were—also, it wasn't the standard ration that a veal calf would get in that it was fortified with iron and so forth.

Mr. ROSE. All right, I am asking you questions Mr. Stenholm asked me to ask you. It says, given your calf studies, is it scientifically accurate to extrapolate your data to fancy-fed veal calves?

Mr. FRIEND. Do we think they are? Yes. They are.

Mr. ROSE. Dr. Saville, on page 2 of your testimony, you state that depriving calves of solid feed not only arrests development of their normal digestive system, but also prevents a normal pattern of oral behavior.

Dr. Friend, do you have an opinion or do you have any knowledge on which to base an opinion about that statement by Dr. Saville? Would you agree with her or not?

Mr. FRIEND. Could you repeat the statement again?

Mr. ROSE. Dr. Saville, if I am quoting you out of context, and if it needs more elaboration on your part, please do, but you, I am told, state depriving calves of solid feed not only arrests development of their normal digestive system, but also prevents a normal pattern of oral behavior.

Let me ask, do you agree with that?

Dr. Saville, what do you mean by that?

Ms. SAVILLE. I mean by that, that eating behavior is an instinctive behavior of calves. It is something that they are born with. If they do not have the opportunity to eat hay or grass or similar roughage, then they still have the desire to do so, so they will chew solid objects that are available to them. In wooden crates, they will actually chew the crates to an extent that they frequently need repair.

They will also attempt to ruminate, even if they do not have much solid food in their rumen to regurgitate. They still go through the motions of ruminating behavior.

Mr. **Rose**. Do any of the other members of the panel have any comments on that who would like to comment?

Dr. McGlone, the subcommittee appreciates your presence here today and your review of this topic. You state feeding a diet containing forage slows calf weight gain. Would you please explain that in greater detail?

Mr. **McGlone**. Yes. Forage is a relatively low energy density diet compared with typical milk replacer type nutrients and so, when a diet contains a greater amount of fiber and less digestible nutrients, then the calf will not gain as fast as when it is fed diets that are more nutrient-dense, such as milk replacer type products.

It is purely a matter of energetics and the resulting weight gain. I don't think there is any disagreement on this point. Calves that are fed forage, compared with calves that are fed typical veal diets, would gain less weight, gain slower.

Mr. **Stenholm**. Dr. McGlone, on page 4 of your testimony, you state the degree to which only limited social contact causes stress among calves is a subject of controversy. What is the controversy and what efforts are being undertaken to resolve the matter?

Mr. **McGlone**. It is a matter of controversy because of how researchers interpret their results and because there is so little research result available.

The studies that are required would involve having calves in different types of social environments, calves in groups, calves in pens, calves in crates, and then measuring certain measures of immune function physiology and these studies have not been done.

What has been done is relatively—I would have to say—superficial examinations of calves in what was reported to be common housing systems and the studies are simply inadequate to draw conclusions regarding how, for example, the health of the calf might be affected when it is in a social group or not in a social group.

One thing that is clear, I think, is that calves that are in social groups have a greater opportunity to pass infectious organisms from one to the other than they have when they are housed individually. This is not to say that individual housing completely eliminates this ability to transmit disease organisms, but it reduces it. This, I believe, is the primary function of individually housing calves.

Ms. **Saville**. Mr. Chairman, may I make a comment on that?

Mr. **Stenholm**. Surely.

Ms. **Saville**. I would agree that this is probably true for enteric diseases, that is, digestive problems, but not necessarily so for respiratory diseases. In fact, individually penning calves tends to put more calves in a given airspace or in a given building and the number of calves and the number of airborne organisms, which affect respiratory disease—our studies of commercial veal production units in Europe have tended to show greater problems of respiratory disease in crated veal calves than in other systems of husbandry.

Mr. McGlone. I might add that I was involved in a research project where we began a group housing system of veal calves with a feed company and we used a system that was recommended in the United Kingdom at that time. I don't believe it is around any more. The calves had such severe respiratory and enteric problems, diseases, that we had to abandon the study part way through.

We were trying to house the calves in what, at the time, was a recommended system in Europe, and it was on a farm in Wisconsin. The weather in Wisconsin, at least when the study was conducted, was not favorable toward natural ventilation in group-housed, straw-bedded pens, and so while I recognize and appreciate the work from overseas, I think it would be ill-advised to use that work as a basis for modern American housing systems.

I think that our conditions are different enough, and the potential abilities of our herdsmen and the potential genetic differences among calves are different enough, that we must develop systems that work in the American way of raising animals and the American climate and feedstuffs and so on before we move calves from what they are in today to some group housing system that is ill-defined and not tested scientifically.

Mr. Stenholm. Mr. Rose.

Mr. Rose. Dr. McGlone, why is there so much industry resistance to allowing a calf to turn around?

Mr. McGlone. That question is better asked of the industry. I will give you my opinion, but I think it, in your mind, should have less value than the same question asked of someone who raises veal calves.

I can imagine a family-type farmer—let's say, veal farms that I have been on with 400 calves—where this is their main source of income and they have an investment in veal calf crates. Those people would suffer an economic problem with restructuring the housing system.

Nobody who is in business likes to retool their operation without some good reason to do so. That is one reason for the resistance.

Are you just talking about the social environment, Mr. Rose? Resistance to the social environment or resistance to the bill?

Mr. Rose. No, the bill, as Charlie Bennett basically said, the one thing that it—really, the only thing that it mandates is allowing a calf to turn around—this total resistant to that and you just telling me that it is all economic.

Mr. McGlone. No, I didn't, sir. No, I didn't say—the resistance of the industry is economic.

Mr. Rose. The resistance to letting a calf have more space in which to turn around, that the main reason the people don't want to do that is just because it has never been done that way. They like having more in a smaller space than if they had to give them more room, it would cost them more and they——

Mr. McGlone. Excuse me, it would hurt the calves, potentially.

Mr. Rose. It would? Having more room would hurt the calves.

Mr. McGlone. Well, we don't know—see, having more room and providing contact with members of your species can be interpreted in very many different ways, as you can imagine. So it would be up to the Secretary, according to the bill, to actually lay out the regulations that are very poorly sketched in the bill.

Mr. NAGLE. Would the gentleman yield?

Mr. ROSE. Yes.

Mr. NAGLE. I wonder if you could answer his question. He didn't say anything about socialization of the calves. He simply said just allowing them to turn around, just a wider crate.

I would like you to address that. We are concerned about that.

Mr. MCGLONE. The resistance to that is primarily economic and primarily that—among the industry. Among the scientists, some scientists—I shouldn't say all—the resistance is we don't know how much space to provide them.

Mr. ROSE. This next question is for Dr. Curtis and you, Dr. McGlone. I want to say up front that I have a tough subcommittee of my own. I am chairman of the Tobacco Subcommittee and I have more problems than the veal industry has.

So one of the standard questions that gets asked when my witnesses come, is the same one I am going to ask you. Do you, Dr. Curtis, or you, Dr. McGlone—Have you ever received or do you anticipate receiving a grant or grants from the veal industry through the veal checkoff fund or otherwise?

Mr. CURTIS. Yes.

Mr. ROSE. Explain, Dr. Curtis.

Mr. CURTIS. About 8 years ago, I was supported in one research project, which has been referred to, I believe, in Dr. McGlone's written testimony. The research was published as a paper by McFarlane et al., in the Journal of Animal Science in 1988. That was for a specific research project which has been funded.

That is the extent of it.

Mr. ROSE. One last question, Dr. McGlone. Can a calf sleep comfortably or groom itself in a current small crate?

Mr. MCGLONE. The question of whether it can sleep comfortably or not is not known. It certainly has to sleep differently in a crate than it sleeps in a larger pen. Whether or not it is uncomfortable is not known.

What was the second part?

Mr. ROSE. That is all. I am really out of time and I apologize. I will get back maybe in another opportunity.

Mr. Chairman, thank you.

Mr. STENHOLM. Mr. Olin.

Mr. OLIN. Thank you, Mr. Chairman.

I would like to ask the panel if they would give me a little better understanding of this issue of the amount of chemicals, antibiotics or whatever kind of drugs are used in a situation where the calves are in crates, as opposed to the situation when the calves are in groups, some kind of a reasonable group.

You have mentioned that the susceptibility to disease is worse in a group than it is in a crate if the calf can't turn it around. I guess that is the way I took it.

No? Could you explain that?

Mr. MCGLONE. No, I am saying that the difference isn't known, but that one might predict that it is worse in a group because of the social interactions, not because of its inability to turn around.

Because of disease transmission while they are in a group compared with individually——

Mr. OLIN. Disease transmission is greater in a group than it is in a crate?

Mr. MCGLONE. Yes.

Mr. OLIN. But then it said that in the crates, much more use of drugs is required.

Mr. CURTIS. That is not a uniform finding.

Mr. OLIN. Where does that come from?

Mr. MCGLONE. I think that comes from nowhere scientifically. I don't think that that has been shown.

Mr. OLIN. Dr. Curtis.

Mr. CURTIS. Yes. As a matter of fact, in the best controlled experiment on the study, again published by Dr. Staincommer in the Netherlands, the use of drugs was actually greater with the grouped animals than with the individually stalled animals. The best scientific evidence that we have is—in the largest number of animals most closely representing commercial production settings, is that drug use is—and the need for medication of calves is actually greater in the group system than in the single-stall system.

Mr. MCGLONE. If I might add one thing that I find a bit of controversy, the work from my colleague, Dr. Friend, at Texas A&M, he has said that—I have seen it more than one place, including his testimony here, that the use of medication is five times greater in group housing than individually and in crates, and he might refresh our memory on that, but I would like to just read one sentence from his paper for the record on that study, and it is a very short sentence, and it says, "The incidence of health-related problems presented in table 4 was too sporadic to be analyzed statistically."

Now, what this means to the scientific community is that the data are too sporadic to be of much general use.

Mr. OLIN. Dr. Friend.

Mr. FRIEND. May I respond to that? I have heard some very interesting things here. This is one of them that is more interesting.

When we do statistics on research data, when we play the research game and try to do statistics on it, there are a few basic premises or assumptions you have to have in order to do normal statistics on your data. Basically, what it amounts to is if you do some sort of experiment with two treatments, you need some response in numbers here and in your other treatment, you need some response in numbers here.

In our case, this one treatment did everything and others did nothing. So it is too sporadic, basically. We have zeros and we have numbers and you can't compare zeros and numbers. It just doesn't work that way. So, yes, we couldn't analyze it statistically, but you just look at the totals——

Mr. OLIN. Are we talking here in terms of these chemicals as being chemicals like antibiotics and different things that relate to the health of the animal only or——

Mr. FRIEND. In this case, these were the amount of days that medication, which is antibiotics, had to be given to the animals for various causes. You look at the dairy industry, for example, and how they house their animals, they virtually never give them antibiotics or the need for medicated feeds, or at least not to the level of veal calf confinement.

Mr. **Olin**. You are saying, really, that—I guess the group seems to be saying that the claims that were made in the little TV thing we saw and we have read about, that excessive drugs are required when you keep the calves in pens, is just not true.

Mr. **Friend**. No, that is true—in pens or——

Mr. **Olin**. You used the word "crates." A confined space. More drugs are required in the confined space than if you had——

Mr. **Friend**. Than if you had them outside.

Mr. **Olin** [continuing]. The freedom of a group.

Mr. **Friend**. Right. One of the easiest things to do is just look at how much the confinement vealers have to feed their animals or how much they have to medicate their rations, versus how much the dairy industry does who raises similar calves, just the females, and the dairy industry doesn't house them in crates, virtually none do. Dairy extension people don't recommend housing calves in crates and our dairy extension people, and most I have known when I was at Cornell, referred to crates as "calf-killers," because of stress-related sorts of diseases.

It is a lot harder to keep them alive in crates and that is where antibiotics comes in.

Mr. **Olin**. You are saying it does require more antibiotics in crates than in groups?

Mr. **Friend**. Right.

Mr. **Olin**. And the other gentlemen say it is not true.

Mr. **Curtis**. I think the jury is still out on that question and I might add that, with regard to problems in analysis of statistical results of research, when you end up with a lot of zeros in the subcells, Dr. Friend, you ask your statistician to help you with a nonparametric analysis.

Mr. **McGlone**. I think the bottom line has to be that, the claim cannot be made based on these data, the data from Texas A&M, that calves require more medication in one environment than in another, regardless of which environments they are. The claim cannot be made—it is not a scientifically valid claim.

Yes, the average was higher, but it makes no difference if there is that much variation and not being able to be subjected to a proper analysis.

Mr. **Rose**. Would the gentleman yield?

Mr. **Olin**. I certainly would yield.

Mr. **Rose**. Let me ask Dr. Curtis and Dr. McGlone something. If I asked 100 people, do you agree or disagree that the Chinese did the wrong thing by killing the students in Tiananmen Square and everybody said no, and nobody said yes, the study would be flawed?

Mr. **Curtis**. No, Dr. Friend has suggested that.

Mr. **Rose**. Oh.

Mr. **Curtis**. He has suggested, because he came up with a bunch of zeros in the subcells, he can't analyze it. You and I agree he can.

Mr. **Rose**. Mr. Friend, that is not what you said, was it?

Mr. **Friend**. No, that is not what I said.

Mr. **Curtis**. I think it is.

Mr. **McGlone**. That is what he said on page 1099 in the Journal of Animal Science. He said, "The incidence of health-related problems was too sporadic to be analyzed statistically." That is what he said in print.

Mr. **Friend**. That is right. You just can't do statistics on it. Like the example you said is a good example——

Mr. **Curtis**. My statistician can.

Mr. **Friend**. Well, that is good. I wish ours could have. He is now running the statistics lab at the University of Arkansas and he is a nonparametric statistician and if you got zeros, you just can't rank them for nonparametric tests. You just can't do anything. Nonparametric tests or ranking—you can't rank zeros. Just too sporadic.

Mr. **Rose**. Maybe I asked the wrong question.

Thank you.

Mr. **Olin**. I think you are on the right track, Mr. Rose, and if I could reclaim my time, I wanted to ask just one more question.

With regard to the use of chemicals added to the feed or however they are used, are there other chemicals used to have some impact on the meat, I guess, or something unrelated with health? Are there chemicals used to cause some kind of change in the animal unrelated to health, and if so, what are they?

Mr. **McGlone**. Are you talking about growth promotants, for example, something like that?

Mr. **Olin**. I am asking. I don't know what I am talking about.

Mr. **McGlone**. There are growth promotants that are available for various classes of livestock and I am not aware of any that are approved for veal calves, but I am very sure that before today is over, you will run into somebody that will be able to give you specifics as to which are approved and which are not.

Mr. **Olin**. Growth hormones are used——

Mr. **McGlone**. Growth promotants.

Mr. **Olin**. And some are approved by the Department and some not?

Mr. **McGlone**. Yes, sir.

Mr. **Olin**. What other types of chemicals might be fed to the calves?

Mr. **McGlone**. Other than growth promotants and products to improve their health——

Mr. **Olin**. Mr. Friend, did you have some thought there?

Mr. **Friend**. That is—other than growth promotants and some vealers do it, you know. These are what we hear, under-the-table sort of thing that use them.

Mr. **Olin**. We will pursue that with some of the other witnesses.

Thank you, Mr. Chairman.

Mr. **Stenholm**. Mr. Johnson.

Mr. **Johnson**. I have nothing, Mr. Chairman.

Mr. **Rose**. May I ask one last quick question?

Mr. **Stenholm**. Surely.

Mr. **Rose**. We are in a time of great ethical turmoil in the Congress. Everybody is worried about ethics. I want to ask you all to tell me, yes or no, is there an ethical problem with raising veal calves in crates where they can't turn around in isolation?

Mr. Friend.

Mr. **Friend**. As a scientist here testifying and giving testimony—

Mr. **Rose**. You don't——

Mr. FRIEND. I would like to allow the ethical questions for you to answer. We present the data as objectively as we can——

Mr. ROSE. That is fine.

Ms. Saville, do you have an answer to my question or do you take the general fifth, as Mr. Friend did?

Ms SAVILLE. I think actually I agree. It is the role of scientists to provide the factual background which the whole of society has to make ethical decisions upon.

Mr. ROSE. All right. Dr. Curtis and Dr. McGlone?

Mr. MCGLONE. For once I agree with Dr. Friend that it is our role to present the facts as we see them and it is for other people to decide on the ethics. I wish, though, that ethics were not legislated, that are not——

Mr. ROSE. Oh—

Mr. MCGLONE. Now, let me finish—that are not legislated based on a minority view.

Mr. ROSE. Thank you.

Dr. Curtis.

Mr. CURTIS. I would hope that if and when legislation comes down with regard to veal calves and other agricultural animals that that legislation, which obviously will have human value and esthetic aspects to it, will be made on the basis of informed judgment.

Mr. ROSE. Thank you all. I think this is something that hopefully we can find a common ground on at some point in time.

Thank you, Mr. Chairman.

Mr. STENHOLM. Is there any evidence that calves raised without roughage suffer from digestive or other health problems? Dr. Friend?

Mr. FRIEND. That is a complex question in a way. You can raise them without roughage quite successfully and a fair number of people do.

Mr. STENHOLM. It seems that, in this panel, there is an agreement that we don't have all of the scientific evidence necessary to answer with 100 percent surety some of the questions that have been posed today.

Is there any evidence that calves raised without roughage suffer from digestive or other health problems?

Ms. SAVILLE. Calves raised without roughage invariably develop hairballs in the rumen and these can often cause blockages and problems with bloat. If bloat is not spotted by the stockman at the time that he is with the calves, they then die.

Mr. MCGLONE. I would say in the United Stated, the answer is "no," to the question.

Mr. STENHOLM. Dr. Curtis?

Mr. CURTIS. I would agree with Dr. McGlone.

Mr. STENHOLM. Thank you very much, each of you, for appearing today. We may have some additional questions to pose of you for the record at a later date.

At this time, I would like to call the veterinarian from the Food Safety and Inspection Service, Dr. Marvin Norcross. If you would take the chair, there are some questions we would like to ask you.

I will recognize Mr. Rose.

Mr. ROSE. Thank you, Mr. Chairman.

REMARKS OF MARVIN NORCROSS, DEPUTY ADMINISTRATOR, SCIENCE, FOOD SAFETY AND INSPECTION SERVICE, U.S. DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY RICHARD CARNEVALE, ASSISTANT DEPUTY ADMINISTRATOR

Mr. Rose. Dr. Norcross, are you familiar with studies——

Mr. Stenholm. First off, excuse me, identify yourselves, both of you at the table, for the record.

Mr. Norcross. I am Dr. Norcross, Deputy Administrator for Science, Food Safety and Inspection Service, and sitting on my left is Dr. Carnevale.

Mr. Carnevale. Assistant Deputy Administrator for the Food Safety and Inspection Service.

Mr. Rose. Gentlemen, we saw a film earlier that said that in 1985, there were 1.7 million veal carcasses slaughtered in the United States and that approximately 1,100 of them were checked and that the unsatisfactory residue level in those carcasses was between 1 and 4 percent. Do you have any comment about that?

Mr. Norcross. Would you repeat the year again, what year?

Mr. Rose. 1985.

Mr. Norcross. In 1985, we classified all calves only as calves. In subsequent times, we have broken the——

Mr. Rose. All right. When is the last year you have them broken down by veal calves?

Mr. Norcross. We have 1988 residue data and we have 1987 slaughter data.

Mr. Rose. Tell me about your residue data.

Mr. Norcross. Yes, sir.

Up until 1987, all calves that were slaughtered were classified only as calves in slaughter data. In 1987, we broke the calves down into four subcategories and they are: bob veal, which are very young calf animals, formula-fed veal, a third category, nonformula-fed veal and heavy calves.

Then, in 1988, we collected residue data on these four classes of calves.

Mr. Rose. All right. I am running out of time and I just want to ask you—you can incorporate this in the rest of your data.

Isn't it true that your data shows that the antibiotic drug residue violation rate for special-fed veal is three times that of the other three categories?

Mr. Norcross. That would be approximately true, yes.

Mr. Rose. All right. Isn't sulfamethazine one of the drugs USDA found last year in fancy veal and isn't this drug considered by FDA to be a suspect carcinogen and one which may cause illness to people especially sensitive to sulfa drugs?

Mr. Norcross. I would prefer the majority of your question be answered by someone from the Food and Drug Administration's Center for Veterinary Medicine. However, I can address your question to some extent.

As far as the residues that we found, they were primarily antibiotics and sulfamethazine was not one of those found to a great extent.

Mr. Rose. Isn't tetracycline the most common drug that you found in fancy veal?

Mr. **Norcross**. That is true.

Mr. **Rose**. All right. I have no further questions.

Mr. **Stenholm**. Mr. Olin.

Mr. **Olin**. Could I ask you something about your sampling plan? Could you describe—how do you decide how many animals to make analyses on with regard to the residue of chemicals and describe why you feel that that program is sufficient to protect the consumer.

Mr. **Norcross**. It is the national residue plan, national residue program. It is a statistically based program that will identify for us an area of residue concern if that problem exists at 1 percent or more of the population with 95 percent confidence.

When we perceive a potential problem, which we did in the calf area, we can implement two other kinds of programs other than the monitoring program that I just described. These would be a surveillance program where we institute a biased program or an exploratory program where we want to collect more information.

In the area of calves, as I mentioned a moment ago, we had some concern. We therefore implemented a surveillance program in these four classes of calves. The numbers that I have just given you, as far as numbers of violations found or confirmed, that is, came from this surveillance program.

Mr. **Olin**. Isn't it true that you are taking and testing a very, very small percentage. I think it said in the film 0.06 percent or something like that.

Mr. **Norcross**. That is true.

Mr. **Olin**. And these calves come from all sorts of environments, growth environments. You don't make an attempt to sample some of each grower's calves, I take it?

Mr. **Norcross**. No, not under the surveillance program. Although the surveillance program could be biased in that direction, we would not ordinarily do that initially.

Mr. **Olin**. How do you justify this very small sample?

Mr. **Norcross**. Statistically, 300 animals is sufficient for the monitoring program. Now, in this surveillance program in calves in 1988, we sampled approximately 1,300 calves.

Mr. **Olin**. Yes, that is how—that came up with—1,300 compared to 1.7 million is a pretty small percentage. Less than a fraction of 1 percent.

To what extent does your program detect vastly different feeding procedures by different types of growers? I mean, your small sample might be fine if you had a fairly uniform population, but if you get a population that has excursions in it, how do you pick those up?

Mr. **Norcross**. When we find an area of concern, such as we may have here, we would then develop a program, which is being done, to review these findings and then implement whatever corrective action we think should be taken.

Mr. **Olin**. Have you found evidence of excessive residues?

Mr. **Norcross**. I don't have the data to answer that with any certainty. The program that we intend to implement will do this and then there is one more further point that I would like to make.

Mr. **Olin**. You don't know whether or not you found excessive residues?

Mr. Norcross. I am sorry, I misunderstood the question. Yes, we have found excessive residues——

Mr. Olin. You have found excessive residues.

Mr. Norcross. Yes, sir.

Mr. Olin. Then did you implement a further program, then, to pin down where that excess came from?

Mr. Norcross. We are in the process of constructing such a program and implementing it.

Mr. Olin. So you have not had such a program in effect.

Mr. Norcross. No, sir, that is true. We go back to 1987 where we broke this class into four subclasses; 1988, the collection of data; and now the analysis of the data and the implementation of the program.

Mr. Olin. Let me ask one more follow-up here, Mr. Chairman. To what—could you describe the nature of the excess that you picked up? How dangerous is that excess to—for human consumption?

Mr. Norcross. Yes, when we take a sample, we have it analyzed quantitatively, as well as qualitatively. In general, the degree of overtolerance tissues is very small. Added to that, we examine kidneys, which are not an abundant portion of the consumer's food supply.

In addition to that, the tolerance which is set for animal drugs is a very, very conservative figure. These three areas certainly add up to, in my opinion, this not being a significant public health problem. Nevertheless, it is of significant concern to us, and our intent is to correct this residue concern.

Mr. Olin. I take it that you are not satisfied with the procedure you have been using, although you think it is probably OK. That is about what you have said.

Mr. Norcross. We think the procedures we have do identify such a concern and then the next step would be to implement a program to address that concern, which does not alter the——

Mr. Olin. Supposing you were wrong in your assumption that everything is OK? What would be the nature of the health hazard that is being caused if you were wrong?

Mr. Norcross. These hazards would be related to the toxicity of the antibiotics involved.

Mr. Olin. They might be toxic to humans, you are saying, yes.

Mr. Norcross. Well, for the reasons I described a moment ago, probably not toxic to humans at the levels that we are here talking about because of the conservatism built into the tolerances for calves. These drugs—most are used in man at much higher levels—however, they are only used intermittently.

Mr. Olin. Dr. Norcross, the subject of this nature, you are going to have to get down to the point where you can describe this thing clearly and concisely with regard to the safety question. I think you are not doing that and that is going to be a real problem for the public to understand what is going on here with regard to these animals and we have all kinds of other animals where this question can come up and you need to get to the point where you can say there is no danger to the consumer, instead of saying, we are conservative, or this or that, instead of being fuzzy around that area—I would certainly urge you to find a way of talking about this in a much more direct and positive way. Otherwise, you are going to be misinterpreted.

Thank you, Mr. Chairman.

Mr. **Stenholm**. Let me follow up on that question.

In the 1,300 samples that you analyzed in 1987, and perhaps in 1988, did you find some violative levels of compounds that should not be in meat?

Mr. **Norcross**. Yes, sir. The data that I described are all 1988 data.

Mr. **Stenholm**. What did you find?

Mr. **Norcross**. We found, of the approximately 1,300 kidney samples tested, we found 43 with violative levels of antibiotics. Of those found, the antibiotics, as I mentioned, were tetracyclines, streptomycin, penicillin and et cetera.

The levels found were not significantly above the tolerance. The tolerance study procedure is a very conservative procedure. The tolerances are set by the Food and Drug Administration's Center for Veterinary Medicine. It is a very conservative procedure. The levels that we are finding in these calves certainly, in my opinion, would not be classified as a significant public health problem.

Mr. **Stenholm**. Are the violative levels set by FDA? What was the worst-case scenario that you found?

Do you have that information?

Mr. **Norcross**. I am afraid I don't have those data with me. I can have it submitted for the record.

Mr. **Stenholm**. Please do. I would like that to be submitted for the record.

[The information follows:]

Prior to 1988, calves were sampled as one slaughter class under the Department of Agriculture's (USDA) National Residue Monitoring Program. The rate of antibiotic violations in calves reached 6.7 percent in 1978. Field observations and results of surveillance sampling indicated that most violations were occurring in bob veal calves. This is a calf which is less than 3 weeks of age and weighs up to 150 pounds.

In 1988 calves were subdivided for sampling into four production classes: bob-veal, formula-fed veal, nonformula-fed veal, and heavy calves. Formula-fed veal is defined as calves weighing between 150 and 400 pounds and raised on a liquid diet up to slaughter. Approximately 1.5 million calves are slaughtered in this class annually. This population represents approximatley 1500 producers and 42 slaughter establishments.

Surveillance sampling results for all calf classes in calendar year 1988 indicate a 2.0 percent violation rate for antibiotics out of approximately 3000 samples. However, the violation rate for formula-fed calves was somewhat higher. Forty-three violations of six different antibiotics were found out of 1359 samples taken:

Formula-Fed Veal

	Tolerance (ppm)	Range of Violations
tetracycline (13)	.25	.29 - 3.75
gentamicin *(10)	0	.01 - 14.08
neomycin (7)	.25	3.24 - 132
oxytetracycline (6)	.1	.41 - 2.48
streptomycin (6)	2.0	2.13 - 4.87
penicillin (4)	.05	.07 - .16

*drug is not approved in cattle or calves, therefore, no tolerance for residues has been determined for bovine tissue.

In three cases more than one drug was detected in the same sample.

Samples were also taken for sulfamethazine residues in formula-fed veal. Of 282 samples only 2 (0.7%) were violative.

Mr. **Stenholm**. Where I am coming from is we have had the clear inference that we have a major health problem and that bothers those of us in the agricultural community.

Now, I am going to make a point in a moment—we have gotten significantly off the subject of today's hearing in getting into food safety and inspection. We are mainly here today to look at H.R. 84 and the veal calf production, the environment, the crates, et cetera, but we are looking at the system.

That is the position from where I'm coming from in asking these questions.

Mr. **Norcross**. Thank you. We do not have a major public health problem. We do have a concern—I would not even classify this as a problem at this point. We had an all-day veal meeting a couple of weeks ago where I routinely said that we do not have a problem. We have a concern. We have residues occurring above tolerance at something in the neighborhood of 3 percent. That is of serious concern to us. We do not want that to occur. We have the mechanism in place to identify concerns like that and we further have the mechanism to control and then eliminate that concern.

It is our intent to do that, as we have done in the past. And, with the conservatisms built into the tolerances, the level of drugs being found in these kidneys, and not at all, in all probability, in the muscle, in the veal meat itself, this is not a public health problem.

Mr. **Stenholm**. Are we talking about substances found in the kidneys or in the muscle?

Mr. **Norcross**. Only in 2 cases of the 43 samples found positive were violative levels found in the muscle.

Mr. **Stenholm**. Any conclusion as to how the substances got into the muscle?

Mr. **Norcross**. This is a function of the amount of residue remaining in the calf and the metabolism of the drug itself. Normally, animal drugs accumulate in the kidney or liver. That is, organ meat. We test the most sensitive tissue.

Mr. **Stenholm**. Any further questions?

Mr. **Rose**. Just one quick question.

You said you agreed with my statement that the antibiotic drug residue violation rate of special-fed veal is three times that of the other three categories of meat.

Mr. **Norcross**. I agreed, approximately, yes sir. The reason for that, if you take approximately 1,300 samples and manipulate the total number of positive samples—that is, 43, it will come out to 3.2 percent.

Mr. **Rose**. But how many—there are four categories of veal. Is that right?

Mr. **Norcross**. We have classified the calves into four categories since 1987.

Mr. **Rose**. And they are?

Mr. **Norcross**. The bob veal calves, the formula-fed veal, topic of this discussion, nonformula-fed, and then heavy veal, heavy western calves.

Mr. **Rose**. All right. Formula-fed. How many tests did you make on formula-fed calves?

Mr. **Norcross**. The data that I have given you are all on formula-fed, approximately 1,300 and 43 violative.

Mr. Rose. So you really tested a lot more veal than that. You tested veal——

Mr. Norcross. Definitely.

Mr. Rose [continuing]. In these other three categories as well?

Mr. Norcross. Absolutely.

Mr. Rose. Thank you, sir.

Mr. Norcross. If I may clarify just 1 more second, this is a special program that I mention here today, a surveillance program. Because the monitoring program pointed to a potential concern, we implemented a surveillance program. We have confirmed what we think is a concern. The next step now is to implement a program to alleviate that concern, which is under way.

Mr. Stenholm. Mr. Jontz.

Mr. Jontz. Thank you, Mr. Chairman. I apologize if you have already answered this question, but let me ask this. Among the samples from formula-fed veal where residues were detected, in what portion of those were residues detected in meat which otherwise would have been intended for human consumption and in what portion of those were residues detected in organs which would not have been directed to human consumption?

Mr. Norcross. To answer the last question first, we assume that all organ meat is for human consumption. Now, it may go somewhere else, but our assumption is, it is for human consumption.

Of the 1,300 samples, 43 were found positive, that is, violative, and 2 of the 43 had violative residues in the meat. The other 41 and the 2 that had violative residues in the meat also had violative residues in the kidney. Forty-three positive kidneys, two of which were violative in the meat.

Mr. Jontz. Thank you.

Mr. Stenholm. The formula-fed numbers that we have been using, how do those numbers compare with the other three classifications of veal? How many samples in the other categories and how many violative levels did you find?

Mr. Norcross. I don't have those numbers, either. I apologize for that. I can submit them for the record.

Mr. Stenholm. Thank you.

[The information follows:]

For comparison the following table illustrates the number of violations detected for antibiotics and sulfonamides in all four calf classes sampled under this surveillance program in 1988:

	Antibiotics	Sulfonamides
Bob Veal		
Samples	266	268
Violations	3 (1.1%)	2 (0.8%)
Formula-Fed Veal		
Samples	1359	282
Violations	43 (3.2%)	2 (0.7%)
Nonformula-Fed Veal		
Samples	1302	249
Violations	14 (1.1%)	2 (0.8%)
Heavy Calves		
Samples	253	268
Violations	3 (1.2%)	4 (1.5%)

Mr. STENHOLM. No further questions? We thank you for coming back and answering these questions. We appreciate it very much.

Mr. NORCROSS. Thank you.

Mr. STENHOLM. We now call the next panel.

Dr. Loew, Dr. Sterner, Dr. Gawthrop, Dr. Smith, and Dr. Warner.

Mr. ROSE [acting chairman]. Gentlemen, we thank you all for being here today and we will try to move this along as quickly as we can.

The panel is composed of five individuals and we will start with Dr. Franklin M. Loew, the dean of the school of veterinary medicine, Tufts University, North Grafton, Massachusetts.

Dr. Loew.

STATEMENT OF FRANKLIN M. LOEW, DEAN, SCHOOL OF VETERINARY MEDICINE, TUFTS UNIVERSITY

Mr. LOEW. I was going to say Chairman Stenholm, Mr. Gunderson, Chairman Brown and Mr. Roberts, but I will add to that Mr. Rose, and members of the committee, thank you for inviting me here.

As you mentioned, I am dean of the school of veterinary medicine at Tufts University.

I wish to support the principle and most details embodied in H.R. 84, five of whose cosponsors, Representatives Atkins, Donnelly, Markey, Mavroules, and Studds, are Members of the House of Representatives from the Commonwealth of Massachusetts. I am also honored that you asked me to be here in the company of these other distinguished panelists.

My testimony indicates my background in this and I will not read that to you in the interest of time. However, let me say that I deal frequently in my position with issues which are perceived very differently by rural and urban citizens, as you do.

Despite the fact that I am a member of many governing boards of agricultural and research organizations, I speak today as an individual and not as a representative of any of these organizations. In fact, I am paying my own expenses to be here today.

As you know, where you stand on an issue often depends on where you sit.

In 1972, I wrote the first North American article on the humane aspects of livestock production to appear in a veterinary medical journal. I support this bill, which would simply require that veal calves be kept in enclosures which, on their smallest side, are at least 6 inches longer than the calf's body length and that allow at least some appropriate amount of physical contact with other calves or cows as well.

This bill would require that these calves be fed a diet based on the known nutritional needs of the calf, as established by the National Research Council. Experts at the U.S. Department of Agriculture, no one else, would actually develop these regulations.

It is difficult for me to see how anyone, much less a veterinarian, could oppose such modest requirements. The veterinarian's oath, as approved and distributed by the American Veterinary Medical Association, of which I have been a member for some 24 years, states in its largest part:

> I solemnly swear to use my scientific knowledge and skills for the benefit of society through the protection of animal health, the relief of animal suffering, the conservation of livestock resources, the promotion of public health and the advancement of medical knowledge.

I just administered this oath to my 1989 graduates and by the end of June, over 2,200 newly graduated doctors of veterinary medicine will have sworn this oath nationally.

In my view, the only possible reason one could have for opposing this bill would be economic, but if it were to pass, the economic playing field would be made level. It would be the same for all producers.

I certainly know of no scientific evidence which indicates that a stall, pen, or crate which is at least 6 inches longer on only its shortest side than the calf itself is somehow harmful to a calf. In fact, there is evidence that an even larger enclosure would be more beneficial, behaviorally at least.

There is certainly no scientific evidence that having contact with others of the same species is detrimental to calves. There is much evidence that it is beneficial. Feeding a diet which meets an animal's nutritional needs strikes me as the bare minimum that ought to be required of anyone keeping animals, be they calves, pets, horses, cattle or swine.

To a veterinarian, an animal with a nutritional deficiency is a diseased animal.

The most recent U.S. Department of Agriculture statistics show that in 1987, some 2,680,000 calves, averaging 239 pounds in weight, were slaughtered under the aegis of Federal inspection. That represents about the same number of calves that were slaughtered in 1982 and 1983, but it is down somewhat from the number slaughtered in 1984 through 1986.

New York led all the States in the number of calves slaughtered in 1988, followed by Wisconsin, Pennsylvania, California and Indiana. Those five States account for nearly 60 percent of all calves slaughtered in this country last year. They are the States with large dairy industries, the source of these calves.

In 1987, the latest year for which these figures are available, some 429 million pounds of veal was produced in the United States, the lowest amount since 1980. By comparison, some 23.5 billion pounds of beef and 14.4 billion pounds of pork was produced.

When American automobile consumers told U.S. car makers their cars were too big by buying Japanese cars, our industry finally started making small cars. It seems to me there is a lesson here for all U.S. agriculture, not just the veal industry.

Of course, not all calves are so-called veal calves, and many of those which are raised for the veal trade are raised by conscientious, hardworking farmers under conditions which already exceed the requirements of H.R. 84. These farmers would not be affected by this bill's provisions.

Legislation such as the bill under consideration here would be unnecessary, in my view, if farmers organizations were to develop an effective system of self-regulation. In my experience, good farmers can recognize bad farmers right away.

Let me add that I testified against a farm animal referendum in Massachusetts last year, partly because I believe that if this sort of legislation is, in fact, the will of the American people, it must be national in scope. If done on a State-by-State basis, farmers in neighboring States would have an economic advantage over those in the State with the legislation. The Massachusetts referendum was flawed in other ways which also led me to oppose it.

I must say, I am surprised at those opponents of H.R. 84 who argue privately that while this bill is not really so bad, its passage will lead the way to other surely more radical legislation. I cannot say whether this is the case or not, but H.R. 84 is hardly an "animal rights" bill. It doesn't propose that calves be given the right to vote; only the ability to move around more normally and to eat a diet which keeps them healthy.

There were those who once said that "organic farming" was nothing but a crazy idea. Today, the issue of pesticide use in agriculture is one of the most controversial of public and congressional concerns.

Similarly, there were those who said that direct marketing of farm produce to the public by farmers themselves would never work. Such critics are now, so to speak, eating their words.

Likewise, I believe that our urban America—98 percent of our population is nonfarm—is now turning its attention to the ways in which some types of farm animals are raised. Of these, I believe that the ways that some—not all, by any means, but some—veal calves are housed and fed are such that this bill is required.

Even the Humane Slaughter Act was opposed by some in the industry and there are individuals and organizations which still oppose the pasteurization of milk and the fluoridation of water.

It is time for agricultural and veterinary medical scientists to join with broad-based humane organizations in dealing with issues of mutual concern in animal agriculture. I was delighted when, in 1988, the Denver, Colorado-based American Humane Association reached out to the scientific community and asked me to form and to chair a new scientific advisory panel for it.

The scientific issues raised by H.R. 84 are, in my opinion, clear. Nothing but good for the animals in question will come from the enactment of its provisions, and I believe that the consumers who have stopped purchasing veal will return to it if this bill is passed.

In conclusion, let me state that we live in changing times. Less than 2 percent of the American population lives on farms and their average incomes are not high. Any changes in the way farm animals are raised that are brought about by changing sensitivities on the part of the over 98 percent of Americans who live in cities and towns and buy their products should not come at the expense of our remaining farmers. If farm animals need better treatment, then so do our farmers. Let's devise ways of helping them both.

This bill would help the calves. I leave it to other legislation to help the farmers. The two goals should not be mutually exclusive.

Thank you.

[The prepared statement of Mr. Loew appears at the conclusion of the hearing.]

Mr. Rose. Thank you very much, Dr. Loew.

Dr. Keith Sterner is the president of the American Association of Bovine Practitioners and represents the American Veterinary Medical Association. He is from Ionia, Michigan.

Dr. Sterner.

STATEMENT OF KEITH E. STERNER, PRESIDENT, AMERICAN ASSOCIATION OF BOVINE PRACTITIONERS, ALSO REPRESENTING THE AMERICAN VETERINARY MEDICAL ASSOCIATION

Mr. Sterner. Mr. Chairman, and members of the committee, my name is Keith Sterner. I am a veterinarian from Ionia, Michigan, who specializes in bovine practice. I am pleased to appear before you today on behalf of the American Veterinary Medical Association and the American Association of Bovine Practitioners.

I would like to summarize my statement for you at this time.

Veterinarians are strong proponents of animal welfare; however, the profession categorically rejects the notion of animal rights. One of the largest challenges in discussing animal welfare lies in keeping the terminology clear.

Animal welfare, not animal rights, is the philosophy strongly embraced by the veterinary medical profession and myself. Indeed, all veterinarians take an oath which affirms our commitment to the protection of animal health and the relief of animal suffering.

The animal welfare issue is complex. I firmly believe that it is essential to determine the status of an animal's welfare on science and fact, rather than emotion. Good livestock and poultry producers are increasingly attentive to the welfare of their animals. The animal's health and welfare and the viability of the producer's business are inextricably entwined.

Confinement rearing may provide opportunities to enhance the health and welfare of veal calves. AVMA recognizes that veal calf production can and should be humane. Flexibility in designing and implementing management systems is essential. Appropriate management by the producer determines whether veal calves live or die. It is proper management, and proper management alone, that can prevent disease by intervening in the relationship between the infectious agent and the veal calf. Calves don't die from lack of exercise; they die from respiratory infections and enteric disease.

Fundamentally, I believe that young calves should be kept in strict isolation from other calves in order to minimize their exposure to pathogenic agents. Although calves are herd animals, their need for socialization must be carefully balanced against the likely transfer of disease.

In my judgment, isolation is both appropriate and desirable to minimize the incidence and spread of disease.

I recommend that all calves receive a daily diet which is nutritionally adequate to maintain health. The National Research Council has established minimum nutritional requirements for dairy replacement heifers, and I believe that the liquid diet fed to veal calves should meet the NRC standards. The form that the diet takes, whether it is liquid or solid, is not the crucial issue, in my opinion. It is the bioavailability of the essential nutrients in the calf's diet that really counts.

Most animals are fed preparations which have sufficient iron for normal growth and development. Hemoglobin levels must lie within normal range to ensure satisfactory weight gain and maximum production. The relative amounts of micronutrients such as copper and molybdenum in a diet influence the bioavailability of dietary iron and contribute to whether or not the animal becomes anemic.

From a health perspective, I am at least as concerned about the presence of selenium and other trace minerals in a calf's diet, particularly those minerals which influence the animal's ability to maintain its immune system.

Facilities should be constructed such that animals can stretch, stand, and lie down comfortably. Calves may or may not be allowed to turn around, depending on management practices, housing, and health. Housing should facilitate the veal grower's ability to observe his or her calves in order to be able to detect disease at an early stage.

Keeping housing clean is an important component of good veal calf management and is indicative of the producer's overall commitment to high-quality management. Specific and particular attention should be paid to maintaining high air quality within the production unit.

Although AVMA supports the intentions behind the Veal Calf Protection Act, the Association, and myself personally, object to the legislation on strictly pragmatic grounds. Unfortunately, H.R. 84 may not improve animal welfare and may, indeed, place calves at increased risk.

Veal calves, when fed properly, in well-ventilated buildings, with proper clean-up procedures, are provided with excellent living conditions. Good preventive medicine procedures can be implemented. Animals can be observed several times a day, and calf losses due to disease are minimal and complete parasite control is possible.

H.R. 84 dictates certain management practices; however, the bill neglects basic mechanisms of disease transmission. For example, the social contact prescribed in the legislation directly contradicts my direct experience as a practitioner. The Veal Calf Protection Act also removes the producer's ability to be flexible and overcome management challenges with creative solutions. To unnecessarily restrict husbandry methods runs directly contrary to innovation, which is the hallmark of American agriculture.

Clearly, the hearing today points out the need for research into the physiology and behavior of veal calves. H.R. 84 does not address that need. Overall, the Veal Calf Protection Act takes an approach that collides head-on with my personal direct experience with the livestock industry in general, and calf rearing in particular. Some of its precepts may prove fundamentally contrary to the successful rearing of healthy veal calves given the present state of knowledge.

As I stated before, and it bears repeating now, veterinary medicine is emphatically in favor of improving animal welfare. The veterinary medical profession does not believe that H.R. 84 will accomplish that goal.

Thank you for this opportunity, Mr. Chairman. I will be pleased to answer any questions you may have.

[The prepared statement of Mr. Sterner appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Sterner.

Dr. Gawthrop.

STATEMENT OF JAN C. GAWTHROP, VETERINARIAN, RENSSELAER VETERINARY CLINIC

Ms. GAWTHROP. My name is Dr. J.C. Gawthrop, and I'm a veterinarian from Rensselaer, Indiana. I work in a private practice, where we work on many different species of animals. I graduated from veterinary school in 1975 and several years after that started developing an interest in veal calves and have since developed a specialty in that area.

I work with my clients, who are veal growers, to increase prevention of disease through improved environment, proper nutrition, timely vaccination, and early detection and diagnosis of disease. I have laboratory facilities to back up my work. I'm a regular and frequent visitor to my clients farms, servicing health maintenance programs.

Because of my mixed practice background, I have the ability to compare veal calf raising operations to many different other types of livestock operations and feel that I have a better background to evaluate whether they are, indeed, appropriate or not.

America has always been against cruelty to animals. That was basically the preamble to Mr. Bennett's piece of legislation. Farmers were the first humanitarians in this country. We were an agricultural country as we began. Early farmers depended upon their animals as a source of food, fiber, horsepower, and currency. Today's farmer still depends upon his livestock as a source of income and as a source of livelihood.

Economics is a hard legislator. It has already passed several laws. One such law is that if a farmer doesn't attend to the proper care, feeding, housing, and nursing of his livestock, those animals will not and cannot perform as they are asked to. He, the farmer, will be without a livelihood. Laws of economics forbid cruelty to farm animals. Further laws are probably not necessary.

Veal farmers are very dedicated to the alleviation of stress. They know stress robs profit. The closeness of that farmer that they develop to their calves simply will not allow them to treat their animals harshly.

Veal farmers are people who feed their animals at 12-hour intervals for the sake and well-being of their animals. Try to find a convenient time, 12 hours apart, during the day to do this. Would you do it at 6 o'clock in the morning and 6 o'clock in the evening, or 3 o'clock in the morning and 3 o'clock in the afternoon? Or how about 12 noon and 12 midnight? I've seen all of these practices used.

Much time is spent in cleaning and scrubbing, spitting and polishing, making sure the equipment and the environment is up to standard. The temperature, the airspeed, the humidity levels in each barn are monitored to make sure that calf comfort is assured. Random blood samples are taken to be certain that calves are not becoming anemic. Diets are closely watched for irregularities. Ask anyone in the feed business that services veal calves how demanding veal growers are that the diets be of utmost quality, consistency, and pallatability. Water quality testing is monitored for impurities. Sometimes they will forget their own house wells, but the calf barn wells are indeed checked constantly.

As a veterinarian, I know that any recommendation that I make for the good of the calves will be followed. I can't say that about any other class of my clients, even those who own pets.

The old saying is, if it isn't broken, why should we fix it? Veal calves are basically nonstressed animals. Veal calves gain more rapidly and more efficiently than any other animal in agricultural production. They can do this because stresses have been reduced. Environmental stresses have been eliminated. Mud, dust, snow, rain, searing heat, and freezing rain and cold have been eliminated. Diets are well-balanced and fortified. Disease control is practiced.

The individual stalls prevent the rampant spread of disease. Vaccination programs are closely followed. Aggression and competition in group situations are not present in veal calf farms. Individual performance is watched and help is given to any animal that is slow in developing. The reduction in stress has allowed a great reduction in the amount of medication being used.

There have been several attempts to improve on the present system. Loose housing was a fad that developed several years ago and failed because of higher levels of illness due to socialization problems. The aggressive, the "boss" calves, would simply not allow the weaker and more timid calves to perform as they should.

Yes, the animals could play together, but they could also abuse and fight with each other. And they could, indeed, infect each other. There was a poor response by these calves as a whole, and it simply is a mirror of the inability of that system to be a workable system.

Recently, profit in the beef industry has caused some of the veal barns to convert to raising what is called dairy beef calves. These are dairy bulls that are raised on veal farms for preparation for the feedlot. Early on in the program they are fed solid food—corn, oats, and pellet diets.

I service these clients as well as those who are in the veal business, and I can testify that the disease levels in these operations are just as high, if not higher, the weight gain is much less, death rates have been higher, and as a person who is a dispenser of medication, I can state that these operations do, indeed, use more medication than the typical veal calf farm.

Farmers are still the most informed humanitarians. They live with and live by their animals. Recently, the American Veal Association, which is a group of veal farmers, initiated a quality assurance program. It is a program that is still in the pilot study phase, where growers will voluntarily follow a program of excellent management which will result in an even more safe quality product. Calves prior to slaughter will be tested for residues of antibiotics and pesticides.

We and our association are looking after ourselves. Good-intentioned advisors from far away may jeopardize the well-being of farm livestock and the livelihood of livestock farmers. There is no need for legislation such as H.R. 84. I ask you, sirs, to allow this bill to humanely be put to sleep.

[The prepared statement of Ms. Gawthrop appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Ms. Gawthrop. Dr. Smith.

STATEMENT OF CLYDE K. SMITH, VETERINARIAN, VALLEY LABORATORIES, INC.

Mr. C. SMITH. Thank you.

I am Dr. Clyde Smith, professor emeritus from Ohio State University. I was a veterinarian in the department of veterinary preventive medicine and in the food animal health research program. I am a life member of the American Veterinary Medical Association, the Conference of Research Workers in Animal Disease. I am a member of the American Association of Bovine Practitioners and a diplomate in the American College of Veterinary Microbiology. I am also chairman of the veal health committee of the American Veal Association.

I have worked directly with veal farmers in Ohio in regard to their veal health programs during a 9-year period, from 1978 to 1987. Since retiring from Ohio State University and moving to Wisconsin, I have continued to remain active in the veal health committee of the American Veal Association.

I oppose H.R. 84, the Veal Protection Act, for the following reasons:

The proposed legislation is ill-advised and unneeded legislation. The premise of the legislation has been developed from information that does not accurately represent the veal farms of today's agriculture. This proposed legislation will impact negatively on all areas of the raising of calves in each segment of the industry. It will be excessively expensive for veal farmers to implement these regulations, and they will not derive an economic return. And this legislation will not improve the health status of the calf and it may impact negatively on the health program for the calf.

I would, at this time, like to comment very briefly on several things that I have in my report. First of all, there is adequate legislation already enacted at the Federal and State levels to deal with cruelty to animals. Also, the premise is that veal calves housed in this manner produces physical restrictions resulting in behavior deprivation and impaired health. One must only consider that these bull calves are sold from the dairy farm and then moved through an auction barn, then to the veal grower. The veal grower usually has 2 or 3 percent mortality with these animals that are handled in this manner, whereas it was stated earlier in this hearing that it is not unlikely that the dairy heifers that remain on the dairy farm have an incidence of death of nearly 15 percent. So actually, the veal grower is doing a better job with animals that have been shipped through an auction barn and then to the veal farm.

It is stated that a frequent practice of feeding a diet-deficient in solid food and iron to produce formula-fed veal makes them become anemic and suffer digestive and other health problems. This is not borne out by current research and has been dealt with earlier.

I would only state that the normal range of hemoglobin for the value of the bovine is 14.5 to 8, and the veal farmer plans to stay within that range.

Another important point is the fact that it was referred to earlier in this meeting that by adopting a pen of this size, veal farmers will be forced to go into group pens. This, of course, make a preventive medicine program and treatment much more difficult and it would, in fact, be detrimental to the calf that it actually attempts to protect.

It is published results that calves fed in single pens have a lower incidence of salmonellosis as compared to those that have a group pen. There is actually a 14 times increase in the incidence of salmonellosis in those calves that are housed in group pens. This study was done with four large veal units over a period of 3 years, and it is published in the Veterinary Record.

A great deal was said about antibiotic residues in the issue, and I think a couple of things should come into the record. First of all, the National Academy of Sciences report in 1980 said, there was no correlation between resistant forms of organisms and disease in humans. The National Academy of Sciences and the FDA looked into this again in 1987, and also, the National Academy of Sciences had their Institute of Medicine inquire into this. They made a report as of February 1, 1989. In that report they stated that, they were unable to find data directly implicating sub-therapeutic antibiotics as a cause to human illness, and they could not provide a numerical answer about risks. So after three reports, there is still not a direct correlation, even though it is frequently told.

We are concerned about antibiotic residues in the veal industry. The report that was given earlier by Dr. Norcross was presented to members of the veal industry. This was the first incidence we've had, even though we have inquired quite diligently about this, that there was a residue increase this year.

The veal industry has responded with what they call a quality assurance program. This quality assurance program, in detail, is in my testimony. It has three main areas.

First, animal husbandry standards and feed practices. It stresses the veterinarian-client-patient relationship that is used for feed medications, individual treatments, establishing withdrawal times, and to test individual animals for medications.

To emphasize on this just slightly, we were told on May 23, for the first time—and we have been inquiring in this regard and concerned with this in our veal health committee for over 2 years, does the formula-fed veal calf have a different withdrawal time; is the metabolism different? On May 23, 1989, we were told that yes, they appear to have higher levels of drugs in the liver than other calves, and consequently, the withdrawal time is extended. So this was told to us about 2 weeks ago.

Second, we have taken action since that time in three fronts. As chairman of the veal health committee, I have drafted a letter and it has been sent to about 110 veterinarians who deal with veal health, relating the information of this committee, of this hearing, telling them to extend withdrawal times on the troublesome antibiotics, telling them to work closely with the veal growers in all of these areas.

And third, part of the quality assurance program is the certification by the farmer that he has followed the quality assurance program, and certification by the veterinarian that a veterinarian-client-patient relationship exists, and he is responsible with the farmer for the health program of the calves.

I feel strongly that, if the quality assurance program is adopted, it will enhance awareness of the husbandry and health programs of the veal calves. It will create a long-term opportunity to build a program of consumer confidence regarding the safety and wholesomeness of the meat. And it will reduce the need for new and burdensome legislation and regulations that may be imposed by Federal agencies.

I want to thank you for the opportunity to appear before you, and I will respond to questions.

[The prepared statement of Mr. C. Smith appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Smith.

Dr. Warner.

STATEMENT OF RICHARD G. WARNER, PROFESSOR, ANIMAL NUTRITION, DEPARTMENT OF ANIMAL SCIENCE, CORNELL UNIVERSITY

Mr. WARNER. My name is Richard G. Warner. I am a professor of animal nutrition, department of animal science, Cornell University. I have been on the faculty for 37 years. I have taught nutrition and conducted research on nutrition and management of dairy calves, including veal calves, during those years.

My presentation will make four salient points.

Point one, the special-fed veal calf is an example of a properly-fed domestic animal. A veal milk replacer contains all 40 nutrients that mammals require, and when reconstituted with water, provides all the nutrition the calf requires.

Calves fed commercially grow at a rate of 2 to 2½ pounds per day. At Cornell University, the University of Illinois, and Ohio State University, experimental calves also grew 2 to 2½ pounds per day. These gains equal the target gains described by the National Research Council in the United States and the Agricultural Research Council of the United Kingdom. In short, special-fed veal calves fed modern milk replacers, and managed effectively, grow at a rate equal to their genetic capability.

Point two, providing limited amounts of iron, coupled with careful monitoring of the calf, produces a healthy, rapidly-growing calf which meets the discriminating market requirements for a pink carcass. Iron is an essential element of the pigment hemoglobin in blood and of the pigment myoglobin in muscle. The marketplace is a discriminating one, with the city chefs and ethnic populations demanding a pink carcass in which the meat is low in myoglobin. The veal farmer is thus faced with the need to produce a healthy, rapidly-growing and, hence, profitable calf, adequate in hemoglobin, with a light pink meat low in myoglobin.

Is this feat possible? Emphatically, yes. European, Illinois University, and Cornell University experiments have demonstrated that moderate levels of iron can be fed such that the calves grow optimally and the carcass meets the requirement for color. For example, the Illinois University studies showed no behavioral problems with low-iron levels and the Cornell University studies showed gains of over 3 pounds per day, with hemoglobin levels of 7.8 grams per deciliter. That's 3 pounds per day with a hemoglobin level of 7.8 grams. In essence, these studies repeat what transpires in commercial veal production today.

Point three, there appears to be no scientific justification for including palatable solid feed in the diet of a special-fed veal calf. A basic nutritional axiom is that animals eat a well-balanced diet to satisfy their caloric requirement. When an animal is satiated, they will not eat much more. In my own experience, two candy bars effectively squelch any desire for a big buffet. The same concept applies to veal calves.

A Cornell University experiment demonstrated that calves fed large amounts of milk ate very little hay, so why bother. Studies in Europe have shown that as little as 75 grams of straw per day will allow the calf about 4 hours of occupation, eating and cud chewing. However, the incidence of abomasal ulcers was increased when straw was added. Again, why bother.

Point four, there is justification for the use of antibiotics in veal feed during the early weeks. The preponderance of scientific data, which I summarized up to 1970 and which is included in the testimony, justified the use of antibiotics for young calves, including veal calves. The question has not been studied in recent years, but I have no doubt that the positive response still exists.

Thus far the FDA, as Dr. Smith just indicated, has not resolved the question that antibiotic resistant organisms emerge from antibiotic feeding and endanger animal and human health. The fact that no serious problems have evolved in the past 40 years as a result of antibiotic feeding suggests that the use of antibiotics during the early weeks of feeding veal calves poses no threat to human health.

In conclusion, this bill implies that present nutritional and management practices for veal calves "causes the animals to become anemic and to suffer from digestive and other health problems." I contend that the excellent growth performance and the extremely low mortality, less than 5 percent, which is, in fact, good or better than most dairy farmers, belies that contention.

No industry is perfect. I urge this committee, rather than passing a bill built in large part on perception, that they consider ways that they might recommend research to elucidate answers to the issues that remain unresolved.

Thank you very much for this opportunity.

[The prepared statement of Mr. Warner appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Warner.

Mr. Rose.

Mr. ROSE. Thank you very much.

Dr. Smith, you talked about the other laws that deal with cruelty to animals. What laws deal with cruelty to farm animals? I don't believe I'm aware of any. The Animal Welfare Act does not apply to farm animals.

Mr. C. SMITH. The question was asked in regard to cruelty to animals?

Mr. ROSE. Yes.

Mr. C. SMITH. I'm not an expert in the area of laws on cruelty to animals, but I know of cases where farm animals have been treated cruelly and they are prosecuted in the local courts, the persons who treat animals cruel. I think this has been on the books for a long period of time, even to when we used horsepower.

In Wisconsin, there was recently a case where an individual had 38 horses and could not bring herself to get rid of them, and she was cited locally on the basis of being cruel to animals.

Mr. **Rose**. Now, I told you all—and maybe you weren't in the room, so I will repeat it—that I am the chairman of the Tobacco Subcommittee and have my own sets of problems in dealing with witnesses, where people ask "do you work for the tobacco companies or the Tobacco Institute," something like that, so I'm asking you all the same thing. I won't ask it of Dr. Smith because he has already told us that he works for the American Veal Association as chairman of their health committee.

But, Dr. Warner, Dr. Gawthrop, Dr. Sterner, and Dr. Loew, have you all ever, or do you anticipate, receiving grants, pay or assistance or money from the veal industry? Dr. Loew, have you ever received any help.

Mr. **Loew**. No, I have not.

Mr. **Rose**. Dr. Sterner.

Mr. **Sterner**. No, Mr. Rose. I'm a private practitioner.

Mr. **Rose**. All right.

Mr. C. **Smith**. May I comment on that, please?

Mr. **Rose**. Yes.

Mr. C. **Smith**. The chairman of the American Veal Association is a voluntary position. I have been chairman of that for about 5 years. I have paid my own expenses to the meeting.

Mr. **Rose**. OK.

Mr. C. **Smith**. I don't receive direct remuneration from the American Veal Association in any way.

Mr. **Rose**. Thank you for that.

Dr. Gawthrop.

Ms. **Gawthrop**. I'm a private practitioner, and about 15 to 20 percent of our practice gross comes from veal calves.

Mr. **Rose**. It does what?

Ms. **Gawthrop**. Comes from veal calves.

Mr. **Rose**. Well, that's not my question. Have you ever received a grant from the veal industry?

Ms. **Gawthrop**. No, sir.

Mr. **Rose**. And you, Dr. Warner.

Mr. **Warner**. I was a consultant for three different veal feed companies in the late sixties to early seventies, for about a year's stint in each one. I have received a $4,000 grant from a milk powder company to do research at Cornell University about 5 years ago.

Mr. **Rose**. That's fine. Thank you, gentlemen.

You made an observation, Dr. Smith, that you had proposed a code—What did you call that, a code of conduct?

Mr. C. **Smith**. Quality assurance program.

Mr. **Rose**. Is that in effect right now, or is it something you all are working on?

Mr. C. **Smith**. We are working on it as a pilot program at this time. We have a goal—at this time we're trying to operate with three veterinarians and about six to eight growers in three different States. We plan to expand that to about 5 States by mid-July to August, and we hope to have the 10 most populace States in the veal industry with programs by the end of 1989.

Mr. **Rose**. Do you see a possibility that this self-regulation program of yours could somehow be merged with some of the goals in this bill? Because my feeling is, if the self-regulation had taken place in this industry already, this legislation wouldn't be here.

You all have given some very interesting answers—not you, Dr. Smith—but other members have, about the oath that you take to relieve animals suffering.

Now, Dr. Sterner, you believe it's the animal's health, is that right, that you took an oath, that suffering is not something that humans can measure in animals?

Mr. **Sterner**. Oh, most definitely suffering, I think, can be measured.

Mr. **Rose**. Would you not say that Mr. Bennett's bill has come from the general perception in at least—how many thousand, Mr. Bennett, signed this petition?

Mr. **Bennett**. 60,000.

Mr. **Rose**. 60,000 people who signed that petition feel that there is suffering taking place in the current way that veal is being raised?

Mr. **Sterner**. Yes, Mr. Rose, I understand that implicitly. But I think Chairman Stenholm pointed out earlier that probably intrinsic to that problem is the lack of public knowledge about production practices. If you will, people operate under the perception that Bambi talks to its mother out in the woods. I'm not saying this to be flippant.

Mr. **Rose**. I think the animal rights people are a little bit ahead of you there, Dr. Sterner. That really is a disingenuous answer if I've ever heard one.

Mr. **Sterner**. Excuse me. I'm saying that some of the fringe articles that I've read and seen, statements made on the periphery of the issue, certainly give that impression.

Mr. **Rose**. I think if the industry reacts to the "fringe," as you call it, those crazy, wild-eyed people out there who think Bambi talks to its mother, you're all in real trouble. Because there is a medium level of concern by people who still eat meat, who believe that research will have to continue to be conducted on animals, who think there's a valid issue here that should be addressed. I believe that the oath you took covers that: relief of animal suffering.

If you believe in that, if you had the kind of self-regulation that Dr. Smith talked about, if it was in place, this bill would have never come up.

Mr. **Sterner**. If I may comment, please, yes, I agree that the legislation is well-intentioned. On the basis of scientific facts, I don't think that it accomplishes that intent.

Mr. **Rose**. Well, Dr. Smith, I don't expect you to answer this—he is a professor to me, because I know him and respect him—but Charlie Bennett said the only thing this bill mandates is to allow the animal to be able to turn around. I would urge you to go back to your health assurance protection committee and for you all to think about what you could gain as opposed to lose for the whole veal industry if you would incorporate some of the things that he has in this bill voluntarily.

I don't expect you to agree with that right now. My sermon is over and I'm not going to pass the collection plate. Thank you for your testimony.

Mr. C. SMITH. Thank you for your comments.

Mr. STENHOLM. Mr. Volkmer.

Mr. VOLKMER. I would like to ask the panel—I've already heard from Dr. Gawthrop—but to the others, have you ever actually been out in the practice of large animal veterinary medicine?

Dr. Warner.

Mr. WARNER. I'm not a veterinarian, so the answer is no.

Mr. VOLKMER. Dr. Smith.

Mr. C. SMITH. Yes. While I was at Michigan State University, I served as relief veterinarian. While at OARDC, I did a regular turn in practice with the herds at the Ohio Agricultural Research and Development Center, as regular work. We were urged to consult with practitioners and herd owners in the field, and so I have had the field experience as a veterinarian and particularly in response to veal veterinarian.

Mr. VOLKMER. Dr. Sterner.

Mr. STERNER. Yes, sir, I am currently in private practice and derive my sole income from dairy practice.

Mr. VOLKMER. Dr. Loew.

Mr. LOEW. Yes. For 10 years I worked in feedlots in western Canada, in Alberta and Saskatchewan.

Mr. VOLKMER. Have you all worked with such things as cow-calf operations, anybody?

Ms. GAWTHROP. Yes, I have.

Mr. VOLKMER. And do you see any distinction between a calf being raised in a cow-calf operation as far as healthwise, as far as the meat ratio of food, et cetera, as between one and a calf in a veal operation, knowing the distinction between the two? In other words, the Holstein bull calf does not produce meat as efficiently as a steer out here, I know that. Do you see any differentiation as far as being healthful?

Ms. GAWTHROP. As far as the health of the animals is concerned? Is that what you're speaking to?

Mr. VOLKMER. Yes.

Ms. GAWTHROP. We're dealing with a more idealistic situation in the cow-calf herd, due to the fact that that animal is never exposed to anyone other than family. We're dealing with a situation here where animals are moved, commingled, and then assembled into one barn. That allows for a greater opportunity for disease to occur. So it should stand to reason that the animal who never leaves the farm would, indeed, have less exposure to disease and, consequently, have less.

If you compare survivability rates, the percent weaned versus those that are born in a cow-calf situation, to what the death rates are in these veal barns, from the time that they're purchased until the time they are sold, the percentages are not too different.

Mr. VOLKMER. I appreciate that point, because I think it's very important.

Is it good practice for any calf, any calf, to start eating solid food right away, or does any calf do that? Anybody can answer it.

Mr. WARNER. Well, if a calf is given access to food on what we consider a herd replacement program, which is limited milk, and then a dry calf starter or hay offered, they will begin to nibble at feed in about 2 weeks. But their intake of milk is considerably lower per unit of body weight than we normally ascribe to a veal calf.

Mr. VOLKMER. Calves don't normally wean from their mother in any instance for several weeks, isn't that right?

Mr. WARNER. Well, a beef calf will be weaned in about 6 months. A dairy calf is removed from the mother and not allowed to nurse the mother probably within 12 to 24 hours. The normal milk-feeding period for a dairy operation for replacement heifers is anywhere from 4 to 8 weeks, and then they are weaned completely and subsist on dry food.

Mr. VOLKMER. What would happen if we didn't have the veal operations at all? What would happen to those bull calves? Anybody have any idea?

Mr. WARNER. I will venture my guess. Most of those would be slaughtered at about 3 to 7 days of age for veal.

Mr. VOLKMER. Dog food? Cat food?

Mr. C. SMITH. Prior to the inception of the commercial veal calf operation as we know it today, I know that many farmers in Wisconsin and Michigan were not even bothering to take the bull calf to market because they could not bother to take the time from work and they would not get sufficient economic return. They were killing the bull calf and disposing of it on the farm. That is, just killing it and laying it aside.

Mr. VOLKMER. Thank you very much, Mr. Chairman.

Mr. STENHOLM. Mr. Jontz.

Mr. JONTZ. Thank you, Mr. Chairman. I want to thank all the panel for the helpful statements, and in particular, I welcome Dr. Gawthrop here and thank you all for your patience with our schedule today.

Dr. Loew, H.R. 84 makes reference to nutritional standards, standards for the content of food for a calf that provides a sufficient supply of palatable and digestible solid food and iron to maintain the calf in good health.

Dr. Sterner has said that, in fact, whether the food is solid or liquid doesn't make any difference; it is the bioavailability of nutrients, et cetera. Do you agree with Dr. Sterner's statement that solid or liquid form of the food is not as important or not important, but rather, what is important is the bioavailability? Is that a correct statement?

Mr. LOEW. Yes, I think that is a reasonable statement.

Mr. JONTZ. So, really, the reference to solid food isn't appropriate or necessary.

Mr. LOEW. I think the operative thing there is that the food that is fed meets the nutritional requirements of the animal.

Mr. JONTZ. I think you make a good point in your statement that it would be hard for anyone to oppose proper nutrition for an animal. I guess the question I want to ask you, based on what you know, is there any—do we really have any evidence that there is a problem with nutrition in veal calves? Is there really a problem there that requires legislation?

Let's put aside the crates and put aside the other questions, let's just focus on the nutrition of the animals. Do we really have a problem there?

Mr. LOEW. The particular issue of concern, I believe, to the drafters, which has been mentioned by others, is the level of iron in the blood, whether the animals are anemic in the normal sense of the word, whether there is enough iron in their blood cells so that enough oxygen gets to their tissues.

There is evidence that many veal calves, not all, but many veal calves have an iron content in their blood that is less than the published normal values for the species.

Mr. JONTZ. They are less than the normal published values. The clinical signs of anemia are loss of appetite?

Mr. LOEW. That might be one. They become pale; there may be abnormalities of the heartbeat. I found interesting that on an earlier panel one of the speakers indicated that anemia has to be, or the amount of iron in the blood has to be, looked at in comparison to the demands that the animal has for oxygen. That is a good point, but what it also means is if you are in a crate and you can't move, I guess you don't need a lot of oxygen. But the animal would still be defined as anemic by any of the books that define the normal values.

Mr. JONTZ. Anemia refers to a relative level of iron, but do we have some reason to believe that the calves do not have an adequate level of iron for the physical activity that is necessary and appropriate for them? In other words, is there some evidence that you can cite to the committee that the level of iron is depressed to the point that the animal's health is suffering? Is there such evidence?

Mr. LOEW. I am not aware of such evidence, but I can tell you this, that the long-term effects of borderline or deficient iron in the blood can become insidious in terms of general resistance to infectious disease, as well as specific defects in heartbeat, for example. But I am not aware—I couldn't cite to you today a specific paper on that.

I must say, I think the issue about oxygen requirement and hemoglobin requirement relative to exercise is a legitimate one and it brings us to the other part of this bill, and that is how much space these animals have to move around in and how much activity they have. I suppose if they were tied down, they wouldn't need any—they would need even less. That is the—and I don't mean it to be funny, but I mean, the fact is, they don't have a lot of room to move around in.

Mr. JONTZ. Obviously—maybe I am mistaken, Dr. Loew, but it seems to me that the weight gain of the animal is really very critical to the economic viability of a veal operation. If iron were depressed to the point where—if iron intake were depressed to the point where anemia occurred with the clinical symptom of failure to eat, that would work at counter purposes, and based on the evidence of weight gain, it seems hard to me to see that, as a practice, the veal producer would want to depress iron to that level.

Mr. LOEW. I agree. I couldn't imagine they would want to do it to that level.

Mr. JONTZ. Let's move on, then, to the issue which is of some other importance here and that is the crates. Now, we are getting a little conflicting opinion here as to what the pros and cons of different levels of socialization is, and Dr. Loew, I am going to give you the chance here to rebut any of your colleagues on the panel because at least one of them indicated some problems with socialization that occurred during the period of time when there was some experimentation with special-fed veal being raised in pens with regard to the infection, the incidence of infection, and also physical abuse and also the issue has been raised about the ability of dealing with individual animal's nutritional needs when they have to compete in the setting where there is more than one animal in a pen.

Now, are those concerns valid or are they not? You argue that the pen is a preferable arrangement, so would you address the other side of that question.

Mr. LOEW. Mr. Jontz, I didn't specifically argue that pens were preferable. I simply agreed with the suggestion or the proposal in this bill that the calves be given more space than given now.

All the bill proposes is that calves have an appropriate amount of physical contact with other members of the same species. That could be adults or other calves, by the way, as I read it, and that the specifics of that would be determined by experts at the U.S. Department of Agriculture, not by me and not by my colleagues here, but by the USDA or the Secretary.

I think there is an enormous body of evidence that suggests that behavioral health is as important as physical health. This is newly emerged over the last quarter of a century, that animal behavior is, indeed, an important science on its own, as well as the equally important sciences of animal nutrition, animal health, genetics, and the other components of animal—what used to be called animal husbandry.

But this bill doesn't mandate that calves be kept in pens, Mr. Jontz. Nor do I particularly advocate that. I simply think that it is reasonable that they be given more space. Six inches more than their body length strikes me as a reasonable amount, although there may be other numbers which research would indicate are more appropriate.

Mr. JONTZ. Perhaps I was incorrectly making the assumption that some others have that the additional space requirements would more or less mandate pens, but answer this question for me, if you would. What about the argument that increased social contact increases the incidence of infection? Is that a valid argument or not?

Mr. LOEW. I think that possibility certainly exists. On the other hand, managers, good managers, I think, are able to arrange groupings of animals, arrange vaccinations through their veterinarians and other health matters to minimize that.

But there is certainly an issue there. This is a very complex area, as I am sure you appreciate, and the key is, in my opinion, the management of the animals. If the industry were able to agree on a set of standards and enforce it itself, I would be the first to, as others have suggested, say we don't need legislation if they can agree on a standard of behavior and enforce it.

Mr. JONTZ. My time is expired and I appreciate the patience of the chairman.

Mr. STENHOLM. Mr. Bennett, sponsor of the bill, would you have any questions of this panel?

Mr. BENNETT. I do have an observation. My favorite program is "All Creatures Great and Small." I see all the reruns of it. I think you are in a wonderful profession, those of you who are veterinarians. I think it is like being a preacher, like being a teacher. One of the top professions, I think, in the world.

With that background, I wonder why there would be any feeling on your part that this bill would be in any way an anathema to you because all it does is allow the Department of Agriculture to conclude what the content of their food ought to be, after having studied it to determine that, and what would keep the animals healthy.

How could you oppose that? There is nothing that is in this bill that is rigid at all. The only rigid thing in the whole bill is that it allows 6 inches clearance in the stall. That is all that is in the bill. As far as that is concerned, if you think it ought to be 5 inches or 7 inches or whatever it is, that could be put in regulation as well.

All this does is let the Department of Agriculture determine how these animals are going to be properly reared from the standpoint of their own health and that we ourselves are healthy at the end of it.

It is interesting you have testified as long as you have and nobody has put anything in quotations, except one gentleman who quoted out of the language, I think, at page 2, lines 7 to 10, well, they can be stricken. That is just what I think—the evidence that we had indicated that is what we ought to have in the bill, but it doesn't affect the bill at all to strike that language.

All this bill does is try to see that we raise healthy veal. That is all it does. I don't see how you can possibly, as people in your profession, have a negative feeling about it.

What is it specifically in this bill that any of you don't like? What would it compel that you object to? Does anybody have anything in the bill you would object to? What do you object to?

Mr. C. SMITH. May I respond to the bill?

Mr. BENNETT. Yes.

Mr. C. SMITH. One of the problems of this bill, even though well-intended, is the fact that if we enlarge the pen size to the length of the calf plus 6 inches, which is basically what you have in the——

Mr. BENNETT. That is firm. That is the only thing firm in the bill.

Mr. C. SMITH. Yes.

Mr. BENNETT. But that can be changed if you would feel better. What size do you think it should be?

Mr. C. SMITH. Pardon?

Mr. BENNETT. What size do you think it should be?

Mr. C. SMITH. The question was asked, what size it should be. At the present time, we are recommending stalls that are 24 inches wide and that are about 65 inches in length. This is based on the research that has been done in development of the veal industry.

Mr. BENNETT. How does that differ from what is in this bill?

Mr. C. SMITH. It means that one calf would—at the present time, if you go to your bill, it means one calf would occupy the floor space in a barn that three calves now occupy.

Mr. BENNETT. Six inches does that. Boy, they must be pretty crowded.

Mr. C. SMITH. Pardon?

Mr. BENNETT. They must be terribly crowded, then, because the stalls we see don't even contain the calves in some cases. Their buttocks are out in the aisle because they can't get—you saw the pictures. And I presume they are typical——

Mr. C. SMITH. I don't understand, but as I understand the requirements of your bill, the smallest dimension would be the length of the calf plus 6 inches. Correct?

Mr. BENNETT. Yes, that is correct.

Mr. C. SMITH. All right. That infers that the other dimension must at least be that size, plus, correct?

Mr. BENNETT. "Of which the smallest dimension is less than the length of the calf measured from the tip of its nose to the base of the tail." You know, I am not really all that tied up in this. This is advice I received. You all are the authorities. Why don't you tell me what size it ought to be.

Mr. C. SMITH. At the present time, we are recommending that the stall be 24 inches wide and 65 inches in length.

Mr. BENNETT. I would have no objection to leaving that—I think there should be something in the bill that allows somebody to determine what is a good size, just like we have on the other thing about food content and about the health. I would have no objection to the Department of Agriculture making a decision based on the evidence coming from people like you.

I didn't set myself up as knowing that much about it. This is the best advice I could get, but why not leave the whole bill just to the Department of Agriculture to decide what regulation it can as to the size of the crate and as to the content of the food and as to the health aspects of it? All this bill does is allow regulations that are to protect the health of the calf and the health of the human being, and if there is nothing unhealthy about what they do, they won't make a regulation on it.

I can't understand you, being in the wonderful profession you are in, taking such a negative view about an industry which may cease to exist if you persist because a lot of people are not eating any veal at all now, including myself. I never eat it. They bring it to me at a banquet, I send it back because I don't feel like the industry is thinking about animals the way it should be as to their health content and as to the humane aspects.

I won't eat it; it is not allowed in my home, and I am missionary about it. I am doing everything I can to see to it that it doesn't exist. As far as I am concerned, if the veal industry is not willing to look at the things that are being done wrong in the industry and is not going to take an initiative in it, it has got my unmitigated and enthusiastic opposition, not just in legislation, but personally.

I belong to a lot of big organizations, like Rotary and things like that. I have urged them not to have veal on any of their conventional diets.

So I don't understand, when the opportunity is here to get a law which you would feel would be a good law, that you would oppose the law. I don't understand that.

I have taken too much time, I know.

Mr. ROSE. May I ask you one question, Mr. Bennett? Aren't you chairman of the Subcommittee of Armed Services that deals with the Navy?

Mr. BENNETT. Yes, Seapower.

Mr. ROSE. You haven't stopped serving veal yet on Navy ships, have you?

Mr. BENNETT. Soon will.

Mr. ROSE. OK, thank you very much.

Mr. BENNETT. Of course, that is a flip remark. I won't do anything that arbitrary. But it is a thing which I will outlive my enemies. I have been here 40 years now and I will eventually win this battle because it is a battle that ought to be won, so it will be won.

It would be better if it were helped by people like you, who are dedicating your lives to help animals to be healthy and help people to be healthy. It would be better if we had your assistance, but if we don't have your assistance, we are going to do it anyway. Not necessarily in this Congress.

Mr. C. SMITH. May I make one comment?

Mr. BENNETT. Yes, sir.

Mr. C. SMITH. The American Veal Association, the veal growers, are working very diligently on this and the American Veal Association's veal quality assurance program is designed with this in mind. It has veal calf husbandry standards. These are published and these are in—will be revised this year.

Mr. BENNETT. How do you penalize somebody when they don't do it?

Mr. C. SMITH. The veal calf industry is not a regulatory industry——

Mr. BENNETT. That is what I said. This is a regulatory bill. This would see to it that people who are cruel to the animals and who didn't see to their health would comply. I am just asking, how do you make people comply?

Mr. C. SMITH. I think there are laws on the books that deal with cruelty to animals, and if not——

Mr. BENNETT. No, there are not. There are some States and some communities that have cruelty to animals—there aren't laws of the Federal nature with regard to domestic animals at all. If you think there are, there are not. I am surprised you don't know it.

In other words, the farm animals are not included in that sort of thing.

Mr. C. SMITH. Yes. I am aware of this, but I know there are States that have——

Mr. BENNETT. There are a few States that do, but we are trying to look at the thing—we are trying to clean up a problem that now is before this country. We would like to have your assistance, not your opposition. You can go home and tell the people that wanted you to come here that you did a good job to kill this bill. Yes, you could do that, but you haven't done a positive thing for the thing you have dedicated your life to, which is to try to see that the animals are healthy and that the people are healthy.

You ought to think about that because there is nothing in this bill that demands any of these things you have referred to. You are worried about the content of some of this food—maybe it is not necessary—but it is all under regulation. You ought to welcome it. You ought not to run it down. You ought to welcome it.

I have said too much. Thank you.

Mr. STENHOLM. Dr. Loew, I took some encouragement from an answer that you gave previously to a question. You stated rather emphatically that self-regulation would be a much better way to go, if I understood you correctly.

Would you go into greater detail regarding your statement?

Mr. LOEW. Sure, Mr. Stenholm.

If Mr. Brown were able to have been here, I would have indicated that I testified before his subcommittee several years ago on various amendments to the Animal Welfare Act and have been interested in these issues because surely these issues are just far more important to urban America than they ever were to a former kind of America.

I have believed in a self-regulation system if it had teeth in it. I think that there are many examples of self-regulating systems that have teeth in them. They occasionally fail, but usually they work. I see no reason why veal producers—who are presumably the ones with the biggest economic vested interest, the ones whose livelihood depends on increasing veal sales, not decreasing, which is what is going on—could not get together, work on the thing that survey after survey shows seem to be of greatest concern to consumers, and that is the amount of space these animals have available to them.

Rightly or wrongly, that is of great concern to the customers for the product, and I think that issue, if it were dealt with by the industry in some appropriate way—Mr. Bennett said, let the experts come up with the right space—I believe they would not only do something good for the calves, but I think they would help their own businesses by promoting consumption of the product.

Mr. STENHOLM. Dr. Sterner, how would you define proper management of veal calf production?

Mr. STERNER. It is a system whereby—and I think I can address some of Representative Bennett's concerns as well, whereby, through production practices, such as providing the calf with adequate nutrition, appropriate space, and good ventilation——

Mr. STENHOLM. What do you mean by "appropriate space?"

Mr. STERNER. I probably have a different definition. I think what we are trying to do, and——

Mr. STENHOLM. Let me interrupt you right there. Mr. Bennett just stated that the only thing that I think he has been interested in is the 6 inches longer than the calf. I do not believe, based on Mr. Bennett's remarks, that there is a clear understanding of the space requirements in H.R. 799.

Mr. BENNETT. I said that is the only thing that is definitive in the bill specifically and it can be amended.

Mr. STENHOLM. That is correct, and that is why I am wanting to follow up with Dr. Sterner.

Is there scientific evidence that provides the proper width and length of veal stalls?

Mr. STERNER. Emphatically, there is not, and I think the testimony today confirms that.

Mr. STENHOLM. So, in your opinion, that is an area that perhaps should be studied in greater length before it is mandated by Federal law?

Mr. STERNER. Yes, sir.

Mr. STENHOLM. Does anyone at the table have a differing opinion of that issue?

Ms. GAWTHROP. I don't know that we can state what is right and what is wrong in the future as we compare one system versus another, but we are dealing with a system right now that the animals have a greater feed conversion than any other type of livestock going. How can they be stressed? How can they be so disadvantaged if they are so terribly housed and treated and fed and cared for? How do they maintain such a good performance record?

It strikes me today, as it has many times, that we are trying to fix something that isn't broken. We are trying to make something better, and if we indeed can make it even better, economics would have dictated that a long time ago. The people who raise veal calves are not mean, nasty people. They will not continue to raise these animals if they thought that they were being disadvantaged or stressed or ill-housed or ill-fed or ill-cared for.

Mr. STENHOLM. The inference of this particular legislation and statements that have been made by several witnesses and some yet to come is that there is something basically cruel to animals that are confined to pens.

There are those that sincerely believe that and I don't discredit anyone's opinion who feels that way.

Mr. VOLKMER. Will the gentleman yield on that?

Mr. STENHOLM. I would be happy to yield.

Mr. VOLKMER. Because I would like to make an observation.

If we are going to start saying that these crates are not sufficient, then you have to do it another way. What does that do to our poultry production? We house a heck of a lot of poultry, broilers, in pens. It is the only way we produce them today. What does that do to my containment operator hog producer who has his in pen, from farrow to finish? Are we going to say that they have to be outside roaming around also?

Do you understand what I am saying? I am just wondering where this all leads us.

Thank you, Mr. Chairman.

Mr. STENHOLM. Thank you.

Dr. Smith.

Mr. C. SMITH. The question was asked in regard to, do we have any scientific evidence with regard to the crates that are being used? I think that the size of the crate and the movement of the animal and normal postural changes has been developed by the industry over a period of nearly 20 years. We may not have information from land grant universities on the size of the crates, but this has been developed within the industry.

Now, I would also caution that in the bill, it calls for the crate or the pen to be 6 inches in length—I am sorry, the length of the animal plus 6 inches at the smallest dimension. That means, then, the containment area is going to be a cubical, at least, or larger, and it also means that this cubical will encompass an area that would normally have been used by 3 calves standing in stalls that are 2 feet wide and 65 inches in length. Therein lies the problem of the economics of this.

Mr. **Jontz**. Would the gentleman yield?

Mr. **Stenholm**. Mr. Jontz.

Mr. **Jontz**. If I might follow up further, Dr. Smith, the bill also requires that the crate or the pen be of a size that allows the proper amount of physical contact with other animals. Now, the existing crates that are 22 or 24 inches across do allow limited physical contact and head-to-head contact. The animal can have contact physically with his two neighbors. But to have a pen three times the size, you couldn't tether the animal any more, to have any physical contact, and then you would have to let the animal loose in the pen.

What are the implications of that?

Mr. C. **Smith**. The implications of this, even if they are in individual pens, are rather strong. First of all, the animal could get into a sucking mode, get into urine-drinking and it could get into a situation of possible eating of their own feces.

This situation may lead to a situation we have established now in the swine industry of recycling antibiotics. When this occurs—and the swine industry has been into this problem now for about 10 years, and they have been trying to extricate themselves from the problem of cycling sulfamethazine from the animals eating the excrement.

If we had group pens or even individual pens, we may get into a situation where these animals would recycle their excrement and withdrawal times would be impossible to establish. So, again, the very thing that the legislation may be trying to bring about will, in fact, be thwarted by this very thing.

Mr. **Jontz**. So, the reason for the tethering of the animals at the present time is to keep the head of the animal and the feeding of the animal away from the excrement?

Mr. C. **Smith**. This is true, and to make observations——

Mr. **Jontz**. Easily, so that you can go down the line of animals and look at each one and examine the head, but if you were going to have a crate that meets the physical requirements of H.R. 84 so far as the width and the length of it, and you are also going to have any physical contact at all, even comparable to what now exists with the narrower crates, then you give up whatever advantage there is to keeping the head of the animal and the feed separate from the excrement, and of course, also you have the time that is involved in trying to get the animal where you can look at him to see when you are checking them out.

Mr. C. **Smith**. Exactly, because the——

Mr. **Jontz**. Is that right?

Mr. C. **Smith**. That is exactly true. The time element of the medication period for the health program, the time element involved in the preventive health programs would be much extended and much more difficult with individually penned calves. I have had experience with this and it is much more difficult to handle and administer preventive medicine programs in individually penned calves than it is in the stalled calves that are tethered.

Mr. Jontz. I thank the chairman for yielding. I wanted to get that opinion on the record.

Mr. Stenholm. Mr. Bennett.

Mr. Bennett. This says, "which prevents the calf from having an appropriate amount of physical contact." The appropriate amount may not be—according to you all, it is nothing. You don't want them to have any contact at all. So maybe that is what the appropriate amount is. So why is it so bad? The appropriate amount might be that it is not good for them to have contact with other animals at all. That is all it says, the appropriate amount.

Mr. C. Smith. May I respond?

Mr. Bennett. Yes.

Mr. C. Smith. I think that if we are going to legislate appropriate contact, appropriate contact must be defined in the legislation. I am not an animal behaviorist, but I think that as far as I am concerned, I would not want the animal to be raised in a manner in which they would be subject or could subject themselves to the feces or other animals or bring about a possible recycling of antibiotics.

Mr. Bennett. If you feel that way and other people that are like you feel that same way, that is likely what the Department of Agriculture would find, isn't it? It leaves it up to them to decide what is the appropriate amount of contact. Maybe they would say that no contact, or maybe they would say that contact maybe ought to be out in a field somewhere. Maybe the animals should be allowed to go out in the fields at some times in their lives. I don't know, but this is the thing which is left up to the Department to determine with good advice from people like yourself.

I don't question your integrity or your intelligence. You know a lot more about this than I do, but I am just trying to see to it that these animals are raised in a healthy manner and that is healthy for the citizens that eat it. That is my total purpose.

Mr. C. Smith. We commend you for this and we are interested, as veal growers, to see that they are raised in a healthy manner also for the consuming public.

Mr. Bennett. If you could suggest any amendments to the bill, I would appreciate it. It would be helpful if you did.

Mr. Stenholm. Mr. Olin.

Mr. Olin. Thank you, Mr. Chairman.

I have to apologize to the panel for not being here during most of your testimony. I have only read one of your testimonies and that is the one of Dr. Warner, from Cornell University. I picked that up because I am a graduate of Cornell University myself, not in agriculture, but otherwise.

I want to just commend you for the clarity of your presentation and the way you have targeted the particular issues and given factual data to support your position, and I expect, from what I have heard from the others, that you have all made a very good contribution to our knowledge of this subject.

Thank you, Mr. Chairman.

Mr. Stenholm. Dr. Long.

Ms. Long. Thank you for appearing here today. Thank you, Mr. Chairman.

I was at another Agriculture subcommittee hearing prior to this and so missed much of your testimony, but am I correct—I am a dairy farmer and have a little experience raising calves myself. Am I correct in concluding from what I have heard and what I have had an opportunity to read briefly that the current practices in the veal industry are actually in the best interest, in your judgment, of the consumer, as well as of the calf, current practices, tethering an animal, small crates, no contact?

Mr. C. SMITH. May I respond?

Ms. LONG. Anyone, sure.

Mr. C. SMITH. The current practices in the veal industry, in the large percentage of the veal industry, is to tether the animal in a crate about 2 feet in width and about 65 inches in length. There is social contact. The calf has contact visually and physically with the neighboring calves. The recommendations of the veal barns and the American Veal Association is that the calves be in stalls which are in rows that are head-to-head and these animals will have visual contact with the animals across the aisle and down the aisle. So there is—they can lick the adjacent calves.

Ms. LONG. But little physical contact and certainly no contact with the feeding equipment of a neighboring calf?

Mr. C. SMITH. That is correct. They do not have contact with the feeding equipment of the neighboring calf.

Ms. LONG. I have another question, and that is, if something like H.R. 84 were to be passed and put into law, in your judgment, is there reasonable potential for enforcing some of the requirements or the stipulations in the bill?

Mr. C. SMITH. I will respond and others feel free to.

I think it was testified earlier that it would be extremely burdensome for the APHIS group to do this. They would need additional information. The exact cash amount was not listed, but they were going to do this.

Ms. LONG. I have another question and that is, if H.R. 84 were passed, would it be reasonable to conclude that most veal farmers would have to add to their operation at least an additional barn and possibly two additional barns because, in essence, what you are doing is—if they are going to continue with the same size operation—in essence, what they would have to do is triple the size of their—is that correct?

Ms. GAWTHROP. Just the square footage requirements of the bill alone is going to require them to expand by two to three times what they now have under roof.

Ms. LONG. An additional related question. What does that do to the profit margin for the veal farmer? Completely wipe it out?

Ms. GAWTHROP. It is not real great right now and any such thing as this is going to severely limit the amount of calves that are raised, period, and we may go back to the days when calves were left to die in the gutters, rather than bother picking them up and taking them to market. I don't think we need to go back to that.

Ms. LONG. I have no other questions, Mr. Chairman.

Mr. STENHOLM. Any additional questions of any member?

Mr. WARNER. Mr. Stenholm, could I make a comment? I am sorry Representative Bennett is not here, but it is clear to me—or at least appears to me that his perception of the veal industry, and perhaps some of the rest of the committee, as well as the general public, is based on "Misery on the Menu" and the ad that appeared in national magazines. That is the educational level that the general public feels about veal.

I have trouble even telling my daughter, after she has seen that ad, to explain to her, in all the eloquence I could generate here, why the veal industry is helpful, not only to the farmer, the dairymen, but also the consuming public.

Mr. STENHOLM. You have those people who believe that we ought to turn all the sows out into a pen and feed them out of a trough because that is normal. Now, anybody that knows anything about raising hogs knows that if you put 10 sows out in a pen and you are going to feed them 5 pounds per day, you are going to put 50 pounds into a trough. Consequently, you are going to get one fat hog and you are going to have one skinny hog and you are going to have eight in between.

If you could take a poll of those sows, you are going to find a mixed bag of opinion. You ask the one that is the thinnest sow whether they like to be out in a pen or whether they want to be tethered in a stall, you are going to find that that one is going to have a different answer than the dominant sow.

Now, these are the kind of, I think, scientific research projects that I hope the entire industry begins to focus on, the veal calf industry, the swine industry, the beef calf, et cetera, because these are the kind of scientific facts that sometimes get lost in our public or personal desire of how we perceive that animals ought to be treated.

The same is true for human beings, quite factually. The only difference is humans can vote and veal calves can't.

I think that is a relevant point.

Dr. Sterner.

Mr. STERNER. Mr. Stenholm, if I may make one comment, with reference to why we would like to see legislation based on science and fact. In preparation for my testimony before this committee, I took the time to go visit some veal operations, albeit first-class ones, and I think that the testimony that you will hear today is on behalf of those who are in the vanguard of appropriate care for their animals.

But one of the judgments that I use has to do with animal behavior with regard to evaluating how they like the environment that they happen to go ahead and be in. One of the things that I noticed in the barns that I went through had to do with abnormal behavior in the calves. This was a—this particular unit raised about 1,000 calves and in walking up and down the rows—and we walked completely through all the barns so I had a chance to personally observe at least the 1,000 calves who were present in this operation—I observed one calf during the entire time exhibiting any abnormal behavior that is classified—technically it is called stereotypy—and it was doing some tongue-rolling. But in terms of abnormal behaviors otherwise that are associated or alleged to occur in this type of a stall situation—of the dimensions Dr. Smith has described—1 in a 1,000, to me, I think is a very small proportion of the population. I will grant you that I wasn't there for a 24-hour period, but my observations were predicated on a timely walk-through of these buildings and discussion.

It was a leisurely pace and we had numerous stops in which I could observe the behavior of these calves.

Thank you.

Mr. STENHOLM. Thank you. We thank all of you very much for being with us today.

Call the next panel. Dr. Fox, Mr. Miller, Mr. Howell, Ms. Wagner, and Mr. Palladin.

The CHAIRMAN. I have Dr. Fox and Mr. Miller. We will follow along as the committee has indicated. So, at this time, I will call Dr. Fox for his testimony.

Dr. Fox.

STATEMENT OF MICHAEL W. FOX, VICE PRESIDENT, BIOETHICS AND FARM ANIMALS, HUMANE SOCIETY OF THE UNITED STATES, ALSO ON BEHALF OF THE AMERICAN HUMANE ASSOCIATION AND THE MASSACHUSETTS SOCIETY FOR PREVENTION OF CRUELTY TO ANIMALS

Mr. FOX. Thank you, Mr. Chairman, members of the subcommittee, Congressman Rose.

I am Michael W. Fox, vice president of Bioethics and Farm Animals with the Humane Society of the United States. We are the largest animal protection organization in the Nation.

On behalf of over 900,000 constituents, many of whom we share with you, I appreciate the opportunity to testify on H.R. 84. I hold a degree in veterinary medicine and a doctoral degree in animal behavior. I have authored publications on farm animal behavior, husbandry, and welfare.

As a veterinarian and animal behaviorist, I am concerned about this issue. I also feel personally disturbed by some of the testimony today. One animal scientist, for example, saying that there is no scientific evidence that the behavioral needs of veal calves are not satisfied in these narrow crates.

I do regard a behavioral need of an animal with four legs to be able to turn around, walk and to be able to comfortably lie down.

Mr. Chairman, with your permission, I would like to summarize my testimony and submit it for the record.

We support this bill, which addresses the health and welfare problems which result from current inhumane confinement of veal calves in small crates. The bill alleviates these problems by mandating a larger enclosure, appropriate physical contact, and a sufficient supply of solid food and iron. We believe it provides minimum requirements for humane treatment of these calves.

Our purpose is singular: the quality of life and humane treatment of an animal. We are not promoting vegetarianism or trying to put the veal farmer out of business. Inhumane treatment of veal calves is largely the fault of a system which makes unreasonable demands on the farmer and is not the fault of the farmer who produces the animal.

While the practice of confining these calves in small crates is common in the United States, in the United Kingdom, use of the standard crate has virtually disappeared. The European Economic

Community has passed a resolution to phaseout veal crates by 1990.

Meanwhile, in the United States, there are no Federal or State guidelines for minimal provisions for humane husbandry of any farm animal, including veal calves. The most common crate system is so confining, the calves cannot turn around or lie down comfortably. This confinement leads to behavioral and health-related problems.

For example, calves are subjected to conditions which cause chronic stress, making them more susceptible to disease and increasing the need for antibiotics. This is not simply a problem of tissue residue, but also fecal contamination of the carcass and transfer of resistant bacteria to other animals in the barn.

Calves cannot express natural behavior, making it more difficult for the farmer to detect disease early on. Calves cannot adopt normal postures to relieve heat stress and to sleep.

I would like to emphasize that they are fed a concentrated liquid diet, the special "milk-fed" veal. They have no free access to water so they thirst. So an indication of their well-being is not how well they eat, but that they are thirsty. They sweat a lot; they put on a tremendous amount of weight in a very short time.

Now, this bill goes a long way, but we are concerned that the bill's language will permit the inhumane practice of tethering to continue. Therefore, we recommend an amendment to section 3, which would clearly prevent it.

If calves have more space, as provided by this legislation, stress would be reduced. Since the calf's behavior would be more normal, farmers could detect health problems earlier on. Given more space, the calves could reduce heat stress by lying down and they could comfortably assume a normal sleeping position.

The fact that it was stated today that we don't know what the normal sleeping position is for a calf and we need more scientific research, I find preposterous. Ask any good veal farmer and he will tell you.

We agree with H.R. 84's mandate for sufficient iron and solid food. This would improve the health of the calf and the profit to the farmer, if not also the nutrition of the consumer.

Without sufficient iron, veal calves are subject to anemia and are unhealthy. Without solid food, the large first compartment of the calf's stomach, the rumen, does not develop properly and normal microorganisms which help deter intestinal disease do not develop in sufficient numbers. This can lead to chronic indigestion, crate-licking and purposeless oral activities such as tongue-rolling.

Now, I visit veal calves and hogs in stalls and so on and when I am there, they are looking at me so they don't engage in stereotypic behavior. So no matter how many animals you walk through and eyeball, you don't get a good behavioral evaluation.

Some solid foods cause the meat to be pinker. However, this does not justify an improper diet. Unfortunately, there is a social consensus that pink meat is less desirable. The veal industry has promoted this European white veal cult for years, but taste tests and the choice of some of the Nation's top chefs prove the best veal does not have to be white.

We hope that this hearing marks a turning point in improving veal calf management. Congressman Bennett's bill represents an excellent compromise between the current crate system and the group housing system so vehemently opposed by many in the veal industry.

These changes will not harm the beleaguered family farm or independent veal producer since it is generally the largest, nonfarming corporate enterprise that contract veal growers and determine what calf-rearing systems they must use.

So long as there is public demand for veal, we believe the public has the right to a wholesome and healthful product. H.R. 84 provides the incentive to the veal industry to produce quality veal which short-changes neither the veal calf nor the consumer and which, in the long term, will therefore benefit the family farming community.

Many members of the farming community will be harmed if this legislation is not passed. We want to work together and we are confident that our different opinions on the treatment of veal calves can be resolved if we do so.

Thank you, Mr. Chairman, ladies and gentlemen.

[The prepared statement of Mr. Fox appears at the conclusion of the hearing.]

The CHAIRMAN. Thank you very much, Dr. Fox.

Next, we have Mr. Dan Howell. We will be happy to hear from you at this time, sir.

STATEMENT OF DAN HOWELL, DIRECTOR, AMERICANS FOR SAFE FOOD PROJECT, CENTER FOR SCIENCE IN THE PUBLIC INTEREST

Mr. HOWELL. Thank you, Mr. Chairman, and members of the subcommittee. I appreciate the opportunity to testify on H.R. 84.

The Center for Science in the Public Interest is a nonprofit consumer advocacy group that represents over 150,000 members. I am director of the center's Americans for safe food project.

Illegal drug residues in calves have long been a problem for Federal regulators. Recent information indicates that formula-fed calves, whose all-liquid diet interferes with the normal development of the rumen, pose an especially serious residue problem when compared to nonformula-fed ruminating calves.

Given the difficulties faced by the U.S. Department of Agriculture and the Food and Drug Administration in preventing illegal drug residues in formula-fed veal, we believe this bill's approach of setting minimum feeding standards requiring the feeding of solid food may prove more effective in ensuring that veal is produced in a safe manner.

Prior to 1988, the violation rate for antibiotic residues in veal calves had been increasing, but it wasn't clear which types of veal had the highest rates. Last year, USDA began, as you have heard, to keep violation data according to different categories of calves, the results showing that formula-fed veal had the highest violation rate, 3.2 percent, almost 3 times as great as for any other class, including nonformula-fed veal.

Last month, FDA officials, discussing these antibiotic violations with the formula-fed or fancy veal industry, told them that not a single drug is specifically approved at this time for use in fancy veal. FDA permits veterinarians to use animal drugs that haven't been approved for a particular species, but their extra label use policy doesn't excuse liability for illegal residue resulting from such use. Thus, if a veterinarian uses a drug approved only for beef calves on a formula-fed calf, it is important to know whether the drug's stated withdrawal time would be the same for both animals.

In fact, FDA studies have shown that the drug withdrawal times that are given for ruminating calves were not sufficient for nonruminating formula-fed calves, increasing the likelihood that extra label use of antibiotics in formula-fed calves will lead to illegal residues.

These residues could pose a risk to human health. Antibiotics such as tetracyclines, which accounted for over half the illegal residues found in formula-fed veal last year, cannot only pose a risk to persons especially sensitive to them, but can contribute to the development of resistant strains of bacteria. Such "super germs" may ultimately reduce the effectiveness of these same antibiotics in the treatment of human illness.

The USDA has also been concerned about possible contamination of veal with chloramphenicol, an antibiotic banned from food animal use because it can cause fatal aplastic anemia. Two years ago, USDA field tests turned up a number of suspect chloramphenicol violations in calves.

But USDA and FDA are unlikely to resolve residue problems in formula-fed veal. USDA has said it may institute a surveillance program for fancy veal similar to the bob veal program, but the bob veal program has been beset by problems for years. Because of problems with the multiresidue test used in that program, USDA has twice made the test less sensitive to antibiotics and sulfa drugs. Even so, the violation rate under the program has been stuck at about 1.5 to 2 percent for several years.

FDA's animal drug program has been intensely criticized by the Intergovernmental Relations and Human Resources Subcommittee, which, in a 1985 report, among other things, specifically charged that FDA's extra label use policy was illegal and increased the public's exposure to residues that are likely to go undetected by USDA's routine monitoring program.

H.R. 84 would require USDA to set standards to provide a sufficient supply of palatable and digestible solid foods to maintain the calf in good health. Feeding calves nutritious solid food that allows for normal development of the rumen should help significantly to address the problem of illegal drug residues in nonruminating formula-fed veal.

Thank you.

[The prepared statement of Mr. Howell appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Howell. Ms. Wagner.

STATEMENT OF MICHALYNN WAGNER, PRESIDENT, MARQUE OF NEBRASKA, LTD.

Ms. WAGNER. Thank you, Mr. Chairman, Congressmen and Congresswoman. Thanks for the opportunity to express my views on the issue of veal husbandry before this agricultural subcommittee and to assure you there is a market for humanely raised, drug-free pink veal.

I was born and raised in Grand Island, Nebraska. Over 90 percent of Nebraska's incomes are provided by agribusiness. Beef is the No. 1 source. Even though I grew up in town, I spent a considerable amount of time on the farm. My father was raised on our 160-acre farm in Hamilton County.

I spent 7 years as an ag-oriented commodity broker. I feel that because of my background, I have an objective, rather than an emotional, opinion.

My first dining experiences with veal took place at upscale restaurants I visited while working as an ag commodity broker. From my first experience, I enjoyed the taste of veal. Initially, I recognized veal was an item on most menus in up-scale dining establishments. While attending a "Weight Watchers" meeting, I learned the value of veal as a protein to be consumed at home, as well as at the restaurant.

In 1982, Merrill Lynch transferred me to Chicago where I was quite surprised to find veal taking up a space in the meat counter at the grocery store equal to the space allowed pork in stores across Nebraska. It was some time later when I learned about the typical crated method of production of veal calves. My enthusiasm for veal was dampened somewhat when I became aware of how this type of veal was raised.

As a result of my new-found awareness, in 1985, I started to research the possibility of working with an alternative veal. I became aware of a commitment by Stagabroga Ranches, Ltd., in Alberta, Canada, to raise a superior veal product "by mother in the sunshine and fresh air."

At this time, I would like to read Chef Detlef Skrobanek's letter to Stagabroga, dated July 4, 1983.

> To whom it may concern:
>
> RE: Romark Veal.
>
> I wish to confirm that the Four Seasons Hotel in Calgary purchased forty (40) sides of Romark Veal from Stagabroga Ranches Ltd. of Priddis, Alberta, in 1982. I was very much impressed with the quality and flavour of this veal. We used much of the product in the Wheatsheaf Restaurant and many of the finer cuts were used in our Trader's Dining Room. We were quite pleased to discover that there is fresh veal of this calibre being raised here in Alberta and being made available at a very reasonable price.
>
> In addition, I found that all of our dealings with Stagabroga Ranches Ltd. were conducted in a businesslike and fully satisfactory manner.
>
> I therefore am pleased to personally recommend both the product, Romark Veal, and the company by which it is raised and distributed, Stagabroga Ranches Ltd.
>
> Yours truly.

Chef Detlef is the first chef in North America to use this veal. He was so delighted with these humanely raised veal calves that when he transferred to Jakarta, Indonesia, calves were slaughtered in Alberta and shipped to him in Indonesia.

With Chef Detlef's response as a guide, I, too, began a search for a superior veal. I describe superior veal as a veal that is humanely raised, nonanemic, without total dependence on subtherapeutic dosages of drugs, that is flavorful, yet delicate and, of course, tender.

In August 1987, I began to put Marque of Nebraska, Ltd., together. My first customer was Bill's Restaurant in Lincoln, Nebraska.

The consumer response was amazing, especially considering that in Lincoln, Nebraska, we just don't eat that much veal.

In August 1988, I incorporated Marque of Nebraska, Ltd., for the purpose of marketing a naturally milk-fed veal. In order to market the end product, I need contracted production. Every producer I contract with has to meet my standards. The calves are raised with their mothers so that mother's milk is their primary source of nutrition. Since the pairs are on pasture or grazing on corn stalks or wheat grass, the calves forage as well as milking, allowing for natural rumen development. These calves do not eat antibiotic feed, nor are they implanted with hormones.

At this point in time, I have marketed Vitellone, which is what I call my product, in the Bay area of California, Missouri, Kansas, Nebraska and will start to service the Minneapolis/St. Paul market in mid-June.

Periodically, my phone rings or I will come home to a message on the answering machine from a chef or restaurant owner inquiring about my "range-fed veal." I have responded to calls from Palm Beach, Florida; Lake of the Ozarks in Missouri; New York City; Minneapolis, Minnesota; Atlanta, Georgia; several California locations and Wichita, Kansas. My only regret is that I do not have an adequate supply of product to meet the demand.

Perhaps I may sum up by borrowing language from one of my customers, Chef Curt Clingman at Olivetto in Oakland, California, "As you know, it is important to us at Olivetto to find animals that are not only raised with the proper diet, but also in a humane fashion."

I invite you to read other letters from chefs provided in my written testimony, as well as from the Mid-Nebraska Ag Development Corporation, who are working with me with my product as an Ag alternative and the University of Nebraska.

Were the Bennett bill enacted, all veal could be raised in a humane, nonanemic, drug-free and profitable manner. All consumers would benefit, rather than a select few.

Thank you for your time.

[The prepared statement of Ms. Wagner appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Ms. Wagner. Mr. Palladin.

STATEMENT OF JEAN-LOUIS PALLADIN, CHEF/OWNER, JEAN-LOUIS AT WATERGATE

Mr. PALLADIN. Thank you, Mr. Chairman.

My name is Jean-Louis Palladin. I am the chef/owner of Jean-Louis at the Watergate Hotel.

I am very pleased to have the opportunity to appear before this committee to testify in favor of H.R. 84, a bill to prohibit certain practices in the raising of calves for veal and for other purposes.

I hope to shed light on this matter from the perspective of someone who has been in the cooking profession for more than 30 years. Although the raising of veal calves is not my field of expertise, during my career, I have become acquainted with many of the methods associated with this area of livestock farming.

In this vein, I plan to direct my comments toward the potential effects of this bill on the quality of veal products used in America. I would like to outline the reasons for my support of H.R. 84.

A. I am opposed to any form of animal cruelty, whether the animals are being raised for human consumption or not.

B. I believe that the lifetime confinement of veal calves in undersized crates produces unethical stress conditions resulting in abnormal behavioral patterns, abnormal endocrine and adrenal functioning, physical illness, such as respiratory and intestinal disease, and physical deformation. The extreme weakness of calves raised in this manner is evident in their inability to support themselves once released from their crates.

C. The diet of calves for veal production is of enormous concern to me. The lacing of milk formulas with antibiotics and other more dangerous drugs has been known to cause dangerous side-effects among consumers, including food poisoning. The exact health hazards of contaminated veal are still unknown, and meat inspection projects are inadequate.

As a chef, the quality of veal used in my kitchen is very important, and yet, of equal concern to me is the quality of life of these calves. I firmly believe that these two concerns are not mutually exclusive.

In a misguided attempt to achieve a superior veal product, some producers engage in unnecessary and cruel behavior by raising calves in undersized crates.

An alternative method is to either raise them in pens, averaging 12 to a pen, or if isolation is a major concern, to drastically increase the size of the individual crates, allowing the calves to stand up, lie down, turn around, stretch and groom themselves. The crates should be designed to contain the animals without the use of chains or ropes. In addition, if at all possible, a bed of straw is the optimal alternative to slotted floor.

The "pure white veal syndrome" of the industry is partly at fault for the anemic diet fed to calves. Yet, for me, the foremost concern is with the taste, not the color of the meat. Eliminating iron from the diet may produce perfectly white meat, but results in anemic calves and yields no additional benefits in terms of flavor.

The ideal diet for young calves is their mother's milk; however, economic pressures eliminate this as a feasible option. In my opinion, a suitable compromise between the current unacceptable practices and natural nursing is high-quality powdered formula enhanced with grain. This would not only result in less anemic conditions, but improved gastrointestinal functioning.

In summation, the present conditions under which veal calves are raised are unacceptable and cruel. Apart from economic concerns, these practices are often defended in the name of a higher quality and more flavorful veal product. I, however, disagree strongly with any such justification and would state instead that these practices result in no discernable improvement.

I believe that the regulations and guidelines outlined in H.R. 84 are required for improving the quality of life for veal calves and the overall quality of the veal industry, thus keeping unsafe veal from human consumption.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Palladin appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mr. Palladin. Mr. Miller.

STATEMENT OF BRADLEY MILLER, EXECUTIVE DIRECTOR, HUMANE FARMING ASSOCIATION

Mr. **Miller**. Thank you very much. My name is Bradley Miller. I am the executive director of the Humane Farming Association. Our organization has been waging a campaign to end the abuses prevalent within the so-called milk-fed veal industry.

Some of the ads referred to earlier were run by our organization as a public service to the community.

I am very happy to report that last Thursday, the California State Senate voted to approve legislation to outlaw the veal crate in California. Last month, the Raley's supermarket chain joined our boycott and has pulled anemic veal from all 55 stores in California and Nevada.

I would like to break from my written statement. There are many things that were said today that were quite concerning. It was unfortunate that the panel of veterinarians—most of them were working in some way with, if not receiving a grant from, at least employed by veal producers. We certainly could have provided many veterinarians that would be strongly opposed to the practices.

In either case, they are starting to change their vocabulary. For years, it has been known within the industry that the calves are, in fact, anemic. All you need to do is look back at some of their own publications and they talk about how to raise anemic calves.

What we have to emphasize here is that as we are arguing about what is and is not severe or borderline levels of anemia, this is all simply being done as a marketing gimmick. We need not be doing this to begin with.

The veal that we are talking about is not saving the consumers money; this is high-priced veal that is selling for two times as much as naturally raised veal. We are really talking about a consumer deception here.

Another thing they have been a little fuzzy on is the use of antibiotics. Many of the veal industry lobbyists flew to Sacramento in California to testify against our State legislation, which, by the way, makes it a little disingenuine when they talk about there is plenty of State legislation that would outlaw this cruelty, when, at the same time, they are fighting these very efforts on the State level.

But those hearings were very revealing. They testified last year that there are no medicated veal calves feeds. If you look at the Senate testimony in California, they were testifying that the feeds are not medicated. Well, just looking at their own veal industry publications—this is from this year, unless they went back to medicated feeds—full-page ads for medicated—not starter feeds. We are not talking about giving the calves antibiotics when they first get into the facilities; we are talking about giving giving them subtherapeutic doses of antibiotics throughout their entire lives.

They talk about there being plenty of controls. The USDA statistics, which they had a difficult time talking about earlier, we have had all along. I don't know why the USDA people couldn't have instant access to this.

The violation rate, antibiotic violation rate for all other forms of veal production is 1.1, 1.2 at the highest. You get into crate-raised veal, it is 3.2, 3 times as likely to have drug residue.

We are talking about a very serious problem that they have really tapdanced around.

Another point that came out is, that virtually all of the drugs used in formula-fed veal production have not been approved for nonruminating calves. You have veterinarians right here in this room, veal producers, that are not using these drugs according to FDA regulations. They haven't been approved for this use.

The opponents have also made claims such as, "Well, we have to chain them in these boxes because—well, gee, if they were allowed to walk or turn around, they would be eating their feces." But the fact is that calves deprived of all solid food and sufficient iron may be driven to eat their feces since they are desperate for essential nutrients. This legislation would correct that problem by providing calves with access to a wholesome diet.

The industry is also repeatedly saying that, "Well, if the calves weren't in a humane situation, they wouldn't gain weight and the producer wouldn't make money." The essence of the argument is, "Well, gee, as long as veal producers are making money, they couldn't possibly be doing anything wrong." We may as well throw out all animal protection laws because whenever industry is using animals, if they are making money, they couldn't be doing anything wrong. We have to understand that weight gain alone is never a legitimate gauge of welfare. Animals are often able to grow and gain weight despite being raised in a harsh environment. There are numerous factors to consider, such as concentrated feed, a complete lack of exercise so they are not using a lot of calories, growth stimulants and so on. To say that weight gain is a sure sign of humane treatment is like saying obesity is a sure sign of health.

The veal industry researchers were questioned on their connection to the veal industry earlier by Congressman Rose—Stanley Curtis mentioned that 5 or 10 years ago he received a grant and John McGlone didn't reply at all, but according to the veal industry's own newsletter, they have applied for and have actually been approved for funding from the American Veal Association to conduct these studies. So it is patently obvious why they wouldn't want to acknowledge the sound scientific studies that have been funded by, not the veal industry and not an animal rights group, but by the U.S. Government, at Texas A&M University, that showed conclusively that these calves are under stress and need additional medication.

It is also troubling, I think, to anyone that isn't tied to the industry in some way, to hear the veal industry researchers say that there has never been—not only for veal calves, but behavioral needs have never been established for any animals. I believe that is a quote. They were up here saying that it has never been established that these animals have any behavioral needs.

What we are talking about here is really a form of extremism. This bill is quite moderate and the issues before this committee are really quite simple. That is, should a calf ever be allowed to walk, or rather, be allowed enough space to turn around during his life? Should a calf be deprived of nutritious solid food simply to produce an unnatural pale-colored meat?

For most Americans, the answer is obvious and that is why the consumer boycott of anemic veal continues to grow and will continue to grow. The veal industry may or may not be able to persuade members of the legislature to disregard the public's opposition to animal cruelty and overwhelming support for this legislation, but they will never convince the American public that these practices are anything but what they are, and that is cruel, hazardous, and utterly indefensible.

Finally, by supporting this bill, this committee would be doing much more than protecting calves from cruelty. This committee would be doing more than protecting Americans from tainted meat. By supporting this bill, this committee would be saving the veal industry from itself. For the sake of the veal industry, if no one else, I urge your support of this legislation.

Thank you.

[The prepared statement of Mr. Miller appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Miller.

We have two votes. We will need to recess for approximately 15 minutes.

[Recess taken.]

Mr. STENHOLM. If we could have everybody back in your seats, back at the table, we will reconvene.

Mr. Volkmer, do you have any questions?

Mr. VOLKMER. I would just like to know, Ms. Wagner, could you tell us, in the operation of the veal operators that you purchase from, what their ratio of gain is per day, the number of pounds?

Ms. WAGNER. No, sir, I can't. I can provide you with that information within the 10 days time that is open here and just to let you know, you were asking about cow/calf operations earlier.

Mr. VOLKMER. Yes.

Ms. WAGNER. I am not dealing with a typical veal calf situation such as you are addressing here. I am working with a cow/calf operator.

He has an alternative market, whether to let me have his calf for veal or whether to take his calf on to a——

Mr. VOLKMER. In other words, the veal that you are getting is actually—would normally be a steer?

Ms. WAGNER. Right.

Mr. VOLKMER. And so that is a little different situation. You are not using dairy calves, in other words.

Ms. WAGNER. That is exactly right.

Mr. VOLKMER. It is basically no different than—some calves that we have in my area are sold for veal also while they are still young, but those don't answer the question, what happens to the dairy calves then, so you don't solve that problem.

Ms. WAGNER. That is correct. No. I do have an observation on that, though. If we had—the dairy termination program, which I believe ended in 1987, and I don't claim to be well-informed on all of the issues involved there and how that really worked, but there is an opportunity for some Holstein mothers to raise some calves, too. Holstein bull calves also go to feedlots. Holsteins are involved in feedlot operations, too, and maybe some Holstein mothers could mother their calves.

Mr. VOLKMER. A Holstein bull calf is not going to have the conversion ratio of feed-to-gain——

Ms. WAGNER. That is true, but they are still used in feedlots and I believe it is in Iowa and I think it is the Safeway stores that are using primarily Holstein meat. That might be cow meat, but it is still Holstein.

Mr. VOLKMER. Mr. Miller, I would like to ask you, you said that a calf has behavioral needs and mentioned walking around and doing things like that. What study came up with this? What scientific study?

Mr. MILLER. What I was referring to there was the blanket statement put forth by the veal industry supporters that have said categorically that there has never been any behavioral need ever demonstrated for farm animals, and thus, we should never take any steps against methods that prevent calves from stretching their legs, turning around, walking, because there has never been a scientific study that said they need to.

I was pointing out the absurdity of that.

Mr. VOLKMER. What is the absurdity? I don't see the absurdity.

Mr. MILLER. There has never been a—I don't know of any scientific study that has ever proven that a dog should ever be able to walk or turn around. I don't know that there has ever been any scientific study that has really proven that any living being on this Earth needs to walk. What we are saying is that these animals have legs; they should be able to use them.

Mr. VOLKMER. All right. Then, are chickens animals also?

Mr. MILLER. I assume you are being facetious, but yes.

Mr. VOLKMER. Yes. And would you say, then, the same thing about chickens that are cooped up and not able to walk around, that they should be made—we should pass laws saying that they should be made to walk around?

Mr. MILLER. I would be interested in any proposal that you have.

Mr. VOLKMER. I have no such proposal, but I know there are millions of chickens in this country today that are not able to walk around. They are producing eggs.

Mr. MILLER. We could always point to somebody else whenever it comes to violence or an abusive situation, whether or not what you are describing is, and say, "Well, there are people over there doing something bad, too. Let's not do anything about this."

Mr. VOLKMER. You are assuming something that—where you and I maybe disagree a little bit and maybe other people may disagree with you. You are assuming that because we do not let chickens walk around, that I am being brutal to chickens.

Mr. MILLER. I didn't even raise the issue of chickens. I was here to testify about this bill. I didn't know that chickens had anything to do with this bill.

Mr. **Volkmer**. Well, a chicken is an animal. A calf is an animal. You are saying that if I don't let the calf walk around, I am being brutal and vicious to that calf. I am saying I disagree with you.

Mr. **Miller**. Of course, you are free to—of course, I respect that, but we have a photograph here. We have libraries of photographs, videos, not just the one that was shown earlier.

The situation is self-evident. The front page of the New York Times, from the top heading to the bottom, is approximately 22 inches. We are talking about a calf at a few days old, chaining that animal in a crate the width of which is that size, no bigger than that newspaper, and never allowing him to walk, never turning around, never stretching out his legs fully and naturally. Most human beings would look at that situation and say, "My goodness, that's cruel. That's harsh."

We are also talking about animals that would normally—one of the—if I may, one of the things that the veal industry has said is that, "Well, these are little babies so they wouldn't be eating solid food anyway." Once again, we are not talking about infants; we are talking about 350-pound animals, 4 months old, that have never had one bite of solid food.

Mr. **Volkmer**. That 350-pound animal is no longer in that 21-inch cage—crate?

Mr. **Miller**. When they are 349 pounds, they are and, yes, actually there is a trend to raise larger calves. There are growers that are raising them to 375 pounds and beyond.

Mr. **Volkmer**. What you are telling me is it is inherent that all animals should have the right to be able to move around. That is what you are saying.

Mr. **Miller**. I wouldn't take major issue with you there, but I was really wanting to talk from my experience in talking to many people in the veal industry, both in crate-raised operations and free range, and having visited dozens—perhaps even more than some of the veal producers here that may be familiar with their own operations, but not necessarily those in other States.

Mr. **Volkmer**. This gets right back to my original question. The question of behavioral needs, you do not see any need for a scientific study as to whether or not there are any such behavioral needs?

Mr. **Miller**. No, not on something that is so clearly a matter of common sense and common decency.

Mr. **Volkmer**. I see.

How many of you have actually been to and visited a veal crate-type of operation?

Mr. Miller.

Mr. **Howell**. I have not.

Mr. **Volkmer**. Mr. Miller is the only one? Dr. Fox.

Mr. **Stenholm**. Could I interrupt at that? How many have you visited?

Mr. **Miller**. I would estimate two dozen. It could be a few on either side of that.

Mr. **Volkmer**. All right.

Dr. Fox, about how many have you visited?

Mr. Fox. I would estimate about six.

Mr. **Volkmer**. About six.

Now, at the time you visited them, before you visited them, Mr. Miller, did you have any preconceived notion as to what an animal should be permitted to do or not to do?

Mr. **Miller**. Yes, I had this peculiar notion that animals should be able to walk and turn around.

Mr. **Volkmer**. All right. Therefore, when you visited them and you saw that they weren't able to walk and turn around, then——

Mr. **Miller**. No, actually what I saw was much more disturbing than that because some of the aspects that we haven't been able to talk about here, such as pneumonia—pneumonia is commonplace throughout these facilities. The calves are not just given routine doses of antibiotics to counteract stress and intestinal disease, but you have a situation where large numbers of animals are confined in small—not small, excuse me—in indoor facilities with basically no windows. They are generally converted. They were originally designed for other purposes.

You have animals that have never been able to walk normally, exercise, develop their lungs properly. They are in a moist situation, generally speaking. If you go into a veal operation, other than the Hollywood-produced videos that the veal industry will show you, they are quite moist and you can hear a constant wheezing and coughing of the calves. We have somebody—if we had been allowed, perhaps, equal time, we would have had someone who worked in a slaughter house, a rabbi that was involved in kosher slaughter, that reports to us, and maybe I will try to get him to write a letter to this effect, that approximately one-third of the crate-raised calves that were raised for kosher slaughter, were not accepted because of pneumonia. One of the things they are looking for the kosher meat is that the lungs have no problems. So many of them did have pneumonia that they weren't of use for that purpose.

You also see animals that are literally lying in their own excrement. They will say, "Well, the feces just fall through these slats," but they are being pushed through the slats by the calf's own body. They are unable to turn around and groom themselves naturally. They are also working that feces up to the front. They will say, "Well, we need to chain their head to the front because if we allow them to turn around, then their head will be where their feces is."

Well, most living beings are given more than two choices of where to place their head and their rear end. It is like saying, "We can't untie"—you have a person hanging from a chain off the edge of a cliff, but "we can't let that person off the chain because then they'll fall down the cliff." What we are pointing out here is that the whole situation is ridiculous and unnecessary. This whole process is simply being done to produce a pale-colored meat.

There is no other reason for this. There is no other reason why they would deny these calves solid food, deny these calves iron. They are talking about monitoring for iron. It is important for the veal producers to monitor for iron. No. 1, they don't want to have the calves so anemic that they do stop eating completely. There are obviously degrees of anemia. You don't want the calf to die. But on the other hand, they have to monitor for iron levels because if they send those calves to market and when they are graded, if they come out red, they simply receive less money. They are docked for every calf that has sufficient levels of iron, that has a natural red color. They are penalized.

This system here is really, in a sense, ruining the veal industry. These producers—you know, this isn't all about these bad producers. These producers, by and large, are not independents. They are, by and large, financed by the feed companies and the packers and they are growing according to those company specifications.

We have people who have got out of the crate-raised industry, that have worked with us in trying to alleviate this situation, that have said that major companies, such as the Provimi Veal Corp., for instance, would tell people who would be raising calves for them that they would not finance them if their barns had windows.

So when we talk about instituting a change, we are talking about a change that in many ways will alleviate the situation for the grower who is really, if you will, caught between a rock and a hard place.

Mr. VOLKMER. Mr. Miller, I am not going to ask you another question for the simple reason it takes too long to get an answer, to be quite frank with you. However, I think I would like to make the statement that it is a little incongruous to me that I would have somebody out there producing veal that has calves that are dying all the time and a third of them cannot be sold and he is still staying in business.

Mr. MILLER. You misunderstood me, I am sorry.

Mr. VOLKMER. At least that is the answer that I understood.

Mr. MILLER. That was simply for kosher, that they couldn't be processed for kosher. They were processed for food and other people ate them.

Mr. VOLKMER. I am one of those who still has the—I don't know, maybe a little bit of feeling, having been raised in the Midwest, raised among animals that the producers of animals that more or less take care of them because they don't want to see them die because when they die, they lose money for every one that dies. They try to take care of them and do the best they can by that animal because they benefit from it, as well as the animal.

It is hard for me to see that these veal producers are out just to do harm to a lot of little baby calves that that is their whole purpose in life, to do harm to those calves.

Thank you, Mr. Chairman.

Mr. STENHOLM. Dr. Fox, do calves that nurse their mothers receive the National Research Council's recommended iron requirements?

Mr. FOX. I don't know whether the NRC has consulted the cows, but I believe that the hemoglobin requirements in the developing calf are inadequately met after the first couple of weeks. This is why there is a normal behavioral requirement, behavioral need, for the calf to start eating higher iron content roughage.

I should like to add, sir, that a calf normally sucks about 24,000 times a day on the mother and this is a very clearly scientifically established behavioral need. When fed out of a bucket, they just don't get those sucks.

Mr. STENHOLM. What do you consider would be appropriate social contact for veal calves?

Mr. Fox. I think one aspect of appropriate social contact is human contact. We have documented scientifically verified studies showing that human contact is important for the health, well-being and productivity of farm animals.

Mr. Stenholm. Walking by and petting the animals?

Mr. Fox. And talking to them.

Also, social contact can include auditory and visual contact as well.

Mr. Stenholm. Would you add anything else to your list of what is appropriate social contact?

Mr. Fox. I would say appropriate social contact for animals that engage in social grooming would be licking each other. This can be a behavioral problem for confined calves. It is a very critical thing for the young calf with the mother, to be licked by the mother. Social contact for the young calf is important.

For example, this colostrum, the first milk that the calf takes in is absorbed and protects it against disease—is absorbed more rapidly when the cow is there grooming the calf. On a lot of dairy operations, they are bottle-fed the colostrum and don't have the stimulation. A human substitute could provide this by grooming the calf or actually spending some time handling the calves in the stalls.

We are talking there about a more labor-intensive shift, but that is for the very young calf. For the older calves, frequent human contact and visual and auditory and possibly physical contact with each other would be beneficial.

Mr. Stenholm. Which is the most important, human contact or contact with the mother?

Mr. Fox. I would say it is a question of quality. There are good mothers and bad mothers and good stockmen and bad stockmen. Some other cows that I have seen—might be better with having the calves with people, but I would say, all in balance, the ideal situation—and this is economics aside—is a free access system where you have a good nurse cow and two or three calves being fed and so on and being raised for veal. That is the idea pastoral system, but we are not talking about that in this bill, but you did ask me what I think the ideal is.

That is back to the "Garden of Eden" which we might feel a little bit obliged to start recreating.

Mr. Stenholm. Mr. Rose.

Mr. Rose. Thank you, Mr. Chairman.

I want to thank all the members of the panel for their testimony. I wish I had time enough to ask all of you questions individually. I am not a farmer, I never have farmed or been to a veal operation, but I am—have been somewhat of a politician for nine terms in this Congress, and I do think I understand something about the politics of how we legislate around here.

I hope the people that I am addressing this to—and that is the dairy people who are going to testify later—I hope they listen to me very carefully and understand that I say this to them in friendship. I have a 100-percent record of supporting the dairy industry. They probably have as many problems in keeping the dairy price support program going in the House and the Senate as any group of people who have farm legislation before us.

I would urge the dairy family farmer to look very carefully at what you are doing to your political stock in the Congress when you come here and advocate a continuation of business as usual for the veal industry. Right or wrong, the perception is out in this country that that little calf in that photograph right there beside the reporter is not being treated properly.

I don't know that. Some of my colleagues on the panel say that that calf is happy. She might have just come from the movies, you know, and had a box of popcorn by some loving rancher from out west. I don't know, but the perception is out there in the country and with a little bit of work and a little bit of compromise on the part of the veal industry, on the part of the animal welfare groups, something—now, if the Veal Association is just interested in scaring veal farmers into paying more dues so they hire more lobbyists—this applies to the Farm Bureau and the National Farmers Organization. If that is what you are all after, you are in trouble. You are barking up the wrong tree.

This thing is a lot more powerful than any of you realize and you are doing a second-rate job of representing your industry if you are pushing a dead calf, excuse the pun.

Ms. Wagner, if the U.S. Department of Agriculture allowed a labeling of humane veal, would that help you and your—what you are trying to accomplish? Right now, word of mouth has got it out that you are raising humane veal.

Ms. WAGNER. That is exactly right. Word of mouth has——

Mr. ROSE. Could there be any change in USDA regulations that would further that?

Ms. WAGNER. The USDA probably has to address the change in their regulations—

Mr. ROSE. We could pass a law to make them do it. That is what I am asking you. If we had a clearly defined humane veal standard and that could be put out there on the shelf, would there be people like you in the country that would produce to that standard?

Ms. WAGNER. Definitely.

Mr. ROSE. Then the marketplace could decide whether they wanted to buy humane veal or crate-fed stuff?

Ms. WAGNER. That is correct.

Mr. ROSE. I am only worried that Jean-Louis is not back home cooking supper——

Mr. PALLADIN. I am going to leave; I am going.

Mr. ROSE. You are getting ready to go. I have great respect for the work that you do. I have constituents who come up here all the time, not to see me, but to go eat at your restaurant.

Thank you, all of you, for your courage in standing up to this problem.

Thank you, Mr. Chairman.

Mr. STENHOLM. Mr. Jontz.

Mr. JONTZ. Thank you, Mr. Chairman.

Mr. Howell, maybe you can clarify something for me with regard to monitoring of residues. In the appendage to your statement, you distinguish between monitoring and surveillance.

Are the numbers which are posted on these charts the result of surveillance or of monitoring, and what is the difference?

Mr. **Howell**. That is a very, very excellent question because although USDA has said this morning that this data is really surveillance data, and I think, Congressman Jontz, the implication is that when we do surveillance, we are sort of going out looking for a problem, so you really shouldn't generalize from it so much. I think that is what the implication is. I am not sure.

We have been told by USDA's Public Affairs Office and Legislative Affairs Office that it is primarily called surveillance because they broke it down into categories. So, it is not all that much different from monitoring data. So, the best we can tell is this is as close as you could come to what would be monitoring data for 1988. It is just that it is very different from what they did before because they finally started breaking down in categories.

That is a very accurate thing to note.

Mr. **Jontz**. Your attachment indicates that surveillance testing is conducted when a residue problem is detected and is designed to investigate and stop the movement of potentially adulterated products into commerce. So one would conclude that under surveillance testing, you really can't—as you continue to say—can't really report a sample which is unbiased because, by definition, it is biased.

So I guess the real question here is the need for clarification by USDA of where those samples came from and until we know more about that, it is impossible to really say whether it is a biased sample or unbiased sample.

What you are suggesting to me is that if—based on the attachment in your testimony, were the USDA to use the word "surveillance" to label that data, that would be an incorrect use of the word "surveillance."

Mr. **Howell**. I think so. It is hard to get too accurate in this whole area, even when we talk about monitoring data. We have had the USDA's own Inspector General's Office say that you can't even rely on that to believe it is something like a random sample because, in practice, they don't really follow random-sample procedures.

Mr. **Jontz**. OK.

Mr. **Howell**. It is a bit of a guesswork any way you look at it.

Mr. **Jontz**. I appreciate that.

Dr. Smith, this afternoon, who is the head of the Animal Health Committee for the Veal Association, expressed some disappointment that information had just recently been made available—I think May 23—on the withdrawal times and I got the impression from him that based on the information which they now—which the industry now has available to them, the industry intends to pursue different practices than what has been the case.

I guess my understanding of the situation is that with an understanding that withdrawal times are longer, obviously you use the antibiotics for a less period of time. Is that right, because what you want to have happen is by the time the animal gets to slaughter, you don't want to have any residues there so you use the antibiotics for a shorter period of time?

Now, is there some reason that that approach to dealing with the problem—if we can use accurate information on withdrawal times for milk-fed veal, is there some reason we can't use accurate information to solve the problem? What you are—the gist of your testimony is that the development of the rumen, which you are saying results from the consumption of grain, provides for lengthening of the withdrawal time or reduction of the withdrawal time—I guess that is the way of putting it—the reduction of the withdrawal time and so you would—you are advocating the bill on that basis.

But, in fact, if you did have accurate information on the withdrawal time for use of antibiotics with milk-fed veal, which we now have, is there some reason we couldn't adjust the antibiotic use accordingly?

Mr. **Howell**. There are several problems, Congressman Jontz. First, the information that FDA has about accurate withdrawal times apparently would only go to sulfamethazine and oxytetracyclines, that is our understanding, and what we are talking about is the use of many other drugs in this class of food product which are not approved, according to FDA. That means we are stuck with the universe of extra-label use, which applies to any drug which might be approved for some species in some amount which a veterinarian, according to certain guidelines, decides to prescribe to a formula-fed veal calf.

Now, how many studies is FDA going to have to conduct of the exact withdrawal time for the various drug and various amount at the various weight and is that really an appropriate role for FDA to be doing? In theory, we are supposed to have an approval process so that approved drugs primarily are relied on. Extra-label use, even if it is legal and, of course, another subcommittee has said that it is not, isn't supposed to be the primary thing we rely on to legally use drugs in food-producing animals.

So while I certainly understand where you are going, and getting that information out to industry couldn't hurt, as you have heard described, this program is going to be put into effect—I don't think it is going to come anywhere near approaching the kind of program that we envision when we think of the Food and Drug Administration safely regulating the use of animal drugs in food-producing animals.

Mr. **Jontz**. Let me just say, I appreciate your answer.

Mr. **Stenholm**. Mr. Olin.

No further questions. We thank you very much for your appearance here today.

Mr. Volkmer, one additional question? Briefly.

Mr. **Volkmer**. This goes back to Mr. Miller and I want to apologize for my temper, but you did say something and we don't have the time here now because of all the panel—if you could submit it to us in writing, I would appreciate it.

You mentioned that some of the veal producers were using antibiotics which were not approved, at least not approved for—where they didn't have the ability to——

Mr. **Miller**. Ruminate.

Mr. **Volkmer**. Right.

Mr. **Miller**. Correct.

Mr. **Volkmer**. Kindly submit those to us in writing.

Mr. **Miller**. I would be happy to, sir.

[The material follows:]

THE HUMANE FARMING ASSOCIATION
Protecting Human Health and Animal Welfare

Appendix to Statement by Mr. Bradley Miller, Executive Director, HFA

The following drugs are among those known to be used in the production of formula-fed veal despite the fact that the Food and Drug Administration (FDA) has not established safe withdrawal times for use in non-ruminating calves. As there is a large number and variety of drugs used in formula-fed veal production, the following is not intended as a comprehensive listing, but rather as examples.

Neomycin

Penicillin

Gentamycin

Tetracycline

Oxytetracycline

Chlortetracycline

Terramycin

Sulfamethazine

Streptomycin

Tylosin

Combiotic

Furazolidone

Nitrofurazone

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Mr. VOLKMER. What we have been talking about here does concern me.

Mr. STENHOLM. Call panel six. Dr. Polzin, Mr. Bassett, Mrs. Greig, Mr. Landwehr, Mr. Lyman, Mrs. DeWall, Mr. Fleishman, and Mrs. Greiner.

Dr. Polzin.

STATEMENT OF HERBERT W. POLZIN, DIRECTOR, VEAL OPERATIONS, MILK SPECIALTIES, CO., AND CHAIRMAN, ANIMAL WELFARE COMMITTEE, AMERICAN FEED INDUSTRY ASSOCIATION

Mr. POLZIN. Chairman Stenholm, members of the subcommittees, I am Dr. Herb Polzin, director of veal operations for Milk Specialties, Co., Dundee, Illinois.

I am a feed person. A lot has been said about that element of the total picture here and I would welcome the opportunity later on maybe to make a few comments about some of the things that have been stated earlier.

As the current chairman of the animal welfare committee of the American Feed Industry Association, I wish to thank the subcommittees for the opportunity to appear today to present AFIA's strong opposition to H.R. 84, the Veal Calf Protection Act. We have submitted a formal statement for the record and I will summarize therefrom.

AFIA is the national trade association representing more than 70 percent of the primary formula livestock and poultry feed sold annually in the United States. AFIA's nearly 700 member companies also include firms which manufacture animal health products, equipment and feeding systems, and provide services to the domestic feed industry.

I have reviewed H.R. 84. While AFIA certainly recognizes the admirable intent of Representative Bennett's bill, we must, nonetheless, oppose it for numerous reasons. H.R. 84, as we have seen this morning, appears to be based upon a perception of an entire segment of animal production as depicted by one producer. However, the content of H.R. 84 must be evaluated based upon the science, fact, and producer experience as they exist in animal agriculture today.

H.R. 84 does not have a scientific basis, nor does it have any basis in improved animal welfare. H.R. 84 puts heavy emphasis on the liquid diet-fed veal calves and how it is deficient in solid food and iron, which consequently causes the animals to be anemic and to suffer from digestive and other health problems. The facts surrounding special-fed veal production simply do not bear out these statements.

It has been said several times today—I would like again to remind you of the typical performance of this type of animal. Namely, we get 2.5 pounds average daily gain every day of the 16 weeks that these calves are in the barn. We get feed conversions of 1.75. Namely, 1 pound of gain for every 1.75 pounds of feed on the average.

We have progressive growers in this industry that do significantly better than that. This is significantly greater performance than we see in other ruminant species.

I think we have previously discussed the subject of anemia. Suffice it to say that, yes, we do regulate the iron intake of the calves in question.

Another misconception has crept into this room today, I think. One of them regards antibiotics in the feed. Make no bones about it, antibiotics are added to some of the feeds that are manufactured in this country and they are not added by other companies, and there are combinations thereof. Nobody denies that.

We have to remember that, at times, calves do get sick, no matter how good the producer or the environment in which they are raised. The welfare of the calf must be considered at all times. Use of antibiotics when appropriate is a sound management tool used to restore the health of the sick animal.

Succinctly stated, proper and timely use of antibiotics enhances calf survival rate and well-being. Medications are logically added only as needed, since they become an added cost if used indiscriminately.

It would be folly to suggest that there is no controversy surrounding low-level antibiotic feeding; however, we rely on the National Academy of Sciences panel recent evaluation, mentioned by Dr. Clyde Smith, which states there is insufficient evidence to substantiate the doom-and-gloom predictions of those who oppose their usage.

H.R. 84 contains several components that would be economically devastating to the veal industry, as well as depressing the dairy and feed economies. Keep in mind that American special-fed veal is a billion dollar industry. If we lose this industry, we lose jobs; we lose outlets for our calves, for the feed ingredients used therein, et cetera.

An especially vexing component of H.R. 84 that relates to economics for the veal growers is the requirement that the primary enclosure of the calf be sized such that the smallest dimension is more than the depth of the calf measured from the tip of its nose to the base of its tail plus 6 inches. We wax prophetic on that.

I think some people in this room forgot about the width dimension. We tried to say it, and I will say it again, under these regulations, our housing capacity would be cut to the point where we only house one calf, approximately, in the area we house three calves now. Those are economically tough conditions to operate under.

Somehow, the impression is widely held that the veal industry in the United States has never really tried loose housing, refusing to test that husbandry system and rejects any call to do so. We alluded to it earlier, but in the early 1980's, this system was used relatively heavily in this country. A lot of effort went into it and, bottom line—and I work in the trenches in my capacity—the bottom line with that system was that it did not work well. It was too labor-intensive, bottom line. We got less than expected calf performance. We got increases in calf disease. We got uneven calf development and, overall, it was a more expensive system with no identifiable benefit to the welfare of the animal. However, we continue to look at the subject of loose housing in our research programs.

In conclusion, my views and background in animal agriculture, in conjunction with working with veal growers for 20 years, cause me to have serious problems with this bill called H.R. 84. The bill is unnecessary. Veal growers are doing an admirable job of providing the consumer with the healthy, wholesome product that they demand of us.

The bill is cumbersome and inefficient for the American veal producer. Their very livelihood is jeopardized by the components of this bill. Congress should join with industry in providing the funding necessary to examine the important aspects of animal care addressed in this bill.

It is not the intent of this legislation that is worrisome to us. It is the fact that emotion and perception have once again pushed science and producer experience out of the discussion. Congress should reestablish these priorities.

It is an admittedly emotional issue, but Congress cannot legislate in such a broad manner based upon emotion or to put some grease to the squeaky wheel.

Thank you for your attention and I will gladly answer any questions you might have.

[The prepared statement of Mr. Polzin appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Polzin. Mr. Bassett.

STATEMENT OF BILL BASSETT, PRESIDENT AND GENERAL MANAGER, BASSETT'S DAIRY FARM, ON BEHALF OF THE NATIONAL MILK PRODUCERS FEDERATION AND THE FLORIDA DAIRY FARMERS' ASSOCIATION

Mr. BASSETT. Good afternoon, Mr. Chairman, and members of the committee.

I am Bill Bassett, president and general manager of Bassett's Dairy Farm in Monticello, Florida. I am testifying today as a dairy farmer on behalf of the Florida Dairy Farmer's Association and as a member of the National Milk Producers Federation.

I want to make it very clear to this committee that this legislation, H.R. 84, is not necessary. It is based on false perceptions and inaccurate representations of animal agriculture. Raising strong healthy calves is the first step in my business in dairying. Raising healthy calves is a job I do well and in which I take great pride. Anyone who does otherwise is simply not practicing professional animal husbandry.

This legislation takes a very negative approach of burdening all farmers with regulation and requirements, while common sense and simple economics work quite effectively to prevent abuse or neglect of farm animals.

The apparent justification for this bill is that farmers are treating their calves so poorly that a Federal mandate is needed to correct the situation. That, Mr. Chairman, simply is not true.

There is only one way for a farmer to make money in the livestock industry. That way is to produce healthy calves. The faster and stronger a farmer's animals grow, the more likely the farmer will make a profit when he sells the animal or its produce.

Bassett's Dairy Farm is a third-generation family dairy farm. We milk 1,600 cows twice a day, taking about 18 hours. We also raise all of our own replacement calves, another 1,600 animals, and farm 2,800 acres of land requiring a total of 45 employees.

At Bassett's Dairy, we have been raising replacement since the dairy began in 1921. It requires six people to efficiently operate our 1,600-head replacement program. The replacement manager devotes 88 percent of his time to the program and 12 percent of his time to the dairy operation. Two additional employees devote 15 percent of their time in areas other than the replacement program.

That equates to approximately five and a half full-time employees involved in the replacement operation. That is five and a half full-time employees whose only job is to raise healthy replacements.

Growth and health of young stock is paramount to the success of our dairy farm. It is so important we have instituted an employee calf bonus program. The employees earn extra income for each calf raised successfully each year. Likewise, we deduct money from the employee's calf bonus for each calf that dies or is culled any time before breeding.

This has been a successful mechanism for increasing and emphasizing the importance of proper care of calves on our farm.

I wanted to share this example with the committee to illustrate the importance that dairy farmers like me place on the proper care of our calves. We raise our calves on a very strict program of proper nutrition and vaccination with great care and attention to detail. To some, this may sound somewhat regimented because we place such a high priority on the health and well-being of our animals. However, successful and profitable dairying today demands farmers give their calves such high priority, and again exemplifies the needlessness of this bill.

H.R. 84 seeks to attack all producers as though they must be told how to care for calves. I disagree strongly with this premise and simply point out that growing healthy calves is exactly what successful dairy farmers do.

I think it is important that the committee and all the Congress know how very seriously we approach proper health care of our young stock so you may understand how unnecessary these legislative calf-raising requirements are.

Mr. Bennett's bill would affect me as a dairy farmer nearly as much as a veal producer. It is difficult enough to make money in the dairy business these days; improper management and neglect of our young stock would only reduce, if not completely eliminate profitability on our farm.

Healthy calf-rearing practices employed on our farm, like those across the Nation, are the recognized industry standards. Developing these techniques required countless hours of research by our land-grant universities and practice by the farmers before us. All of this is done with the single goal of maximizing the animal's performance.

We have a very successful system in place. I can tell you exactly what it costs to raise a calf on our farm. If a better way of raising calves is developed, you bet that I will adopt it.

What this legislation does is require farmers who raise calves to follow certain prescribed methods. Where this legislation is wrong is in assuming that this can be done. What may be the best way to raise calves today may not be the best way tomorrow, nor is there any one best way for everyone in every location.

However, farmers will know if a better way comes along. Farmers will adopt the new and better ways of producing calves because they are always searching for better methods.

American agriculture has been able to lead the world because of the successful relationship that has developed between agricultural researchers and the farmers. Farmers are able to implement the latest university developments through the assistance of the Cooperative Extension Service.

I am concerned this committee is considering legislation that is going to put this successful relationship out to pasture. I am disappointed this committee is considering legislation that is not only unnecessary, but would drive a lot of good farmers out of business and cost me more money as a taxpayer.

If the committee would like to improve the animal husbandry practices and conditions of calves on America's farms, you would be much farther ahead to appropriate more dollars for research and education at the universities and through the USDA than to pass this needless legislation.

Thank you.

[The prepared statement of Mr. Bassett appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mr. Bassett. Mrs. Greig.

STATEMENT OF CONNIE GREIG, CHAIRWOMAN, ANIMAL CARE SUBCOMMITTEE OF THE ANIMAL HEALTH AND INSPECTION COMMITTEE, NATIONAL CATTLEMEN'S ASSOCIATION

Mrs. **Greig**. Good afternoon. My name is Connie Greig. I am a beef cattle producer from Estherville, Iowa, and chairman of the NCA's animal care subcommittee. Thank you for the opportunity to testify today.

The National Cattlemen's Association opposes H.R. 84. The bill is an unnecessary and inappropriate broad first step toward Federal regulation of the production practices of animal agriculture.

We, as producers, don't condone and we won't tolerate the actions of the few who abuse or mistreat their animals. To my knowledge, all States have laws dealing with the inhumane care and mistreatment of animals. We in the beef cattle industry want them to be fully enforced.

Time and time again, we cattlemen have definitely substantiated the State laws and urged prosecution when we have seen violations. However, a Federal law to deal with the one or two bad apples is unnecessary and an obvious waste of Government resources.

H.R. 84, if enacted, could have a substantial impact on the agricultural community well beyond veal producers. For example, section 6 of the bill defines a calf as any bovine under the age of 9 months. Veal calves, dairy calves raised for replacement and beef calves still on their mamas. My calves will be on their mamas until September and they will be less than 9 months of age when they are weaned.

I hope some Government official doesn't come to the lot and check those calves at weaning time right when they are being stressed to determine if they are getting adequate nutrition.

We in the beef industry feel the veal industry has been victimized by sensationalized, inaccurate portrayals in the media. H.R. 84 reflects that view.

You have heard it said several times today that the activist criticism is based on emotion rather than on fact or any direct experience with livestock production. Here is an example of how that might work.

Most veal calves in the United States, as you know, are Holsteins, the Holstein breed. We occasionally feed Holsteins in feedlots. We can't feed them in northwest Iowa in the wintertime. They can't stand the cold. We feed most breeds outside, but Holsteins must be housed inside. Many people, most people, don't know that, don't realize the difference between breeds of cattle and how they are to be handled differently. Producers know that. Just one example of why production practices must reside in the hands of producers. H.R. 84 affects all production agriculture. It is unwarranted. It would have very broad impact and is, without a doubt, a dangerous precedent.

Mr. Stenholm, regarding your comments when you convened this hearing, in order to handle this issue in a positive way, all segments of the beef industry—veal, dairy, and beef—came together several months ago to develop a long-range plan to communicate to the public our story, the accurate story, of how we raise animals.

We are proud of the care we give our animals, and of the products we provide to the consumer. We look forward to telling our story, the livestock producer's story, to the public. If we do that, and if we do it well, and if we do it right, we believe their confidence in our methods of animal care will remain strong.

Thank you.

[The prepared statement of Mrs. Greig appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mrs. Greig. Mr. Landwehr.

STATEMENT OF LEN LANDWEHR, WISCONSIN VEAL FARMER, ON BEHALF OF THE AMERICAN FARM BUREAU FEDERATION

Mr. LANDWEHR. Mr. Chairman and other members of the subcommittee, thank you for the opportunity to appear before you today to address H.R. 84. I am Len Landwehr, a veal farmer from DePere, Wisconsin. I operate a small family farm that has about 70 acres, with facilities to house 625 veal calves at one time. I annually market about 1,600 head of veal calves.

I present my testimony today on behalf of the American Farm Bureau Federation, the Nation's largest general farm organization. The American Farm Bureau could also be considered among the largest animal welfare organizations since we promote proper handling, care, and treatment of our livestock.

The American Farm Bureau would like to express its opposition to H.R. 84. Our opposition is based on the fact that the legislation is unnecessary, is founded on misguided emotional perceptions, has detrimental effects on veal, beef, and dairy farmers, and results in increased cost to American taxpayers.

This legislation is totally unnecessary. The misguided emotional perception that led to this legislation is that farmers do not provide for their livestock's welfare and subject their animals to abuse. This is followed also by the misguided notion that only Federal regulation of farms could correct such a problem.

Neither of these perceptions are correct. Farmers care for their animals, neither tolerating nor condoning abuse, and go well beyond their role of humane stewards to provide for the animal's welfare. We work hard to reduce the animal stress that could result from improper diet or unhealthy environments. As a matter of fact, housing on veal farms is designed to provide for the health and welfare of the animals by affording protection from the elements and predators and provide for individual attention by the farmer for each animal.

Diets are carefully calculated through scientific studies to provide for healthy, growing animals. Far fewer young calves die today from the pneumonia and other related diseases. No segment of society has more concern for the well-being of livestock than producers. This is exemplified by the high levels of production and low mortality rates being achieved in modern livestock operations.

H.R. 84 would have a severe detrimental effect not only on veal producers but also on beef and dairy producers. The veal producer would suffer a major financial loss if forced to abandon present facilities and equipment simply to comply with regulations. At the same time, he would be forced to invest in new equipment if he hoped to remain in veal production. No compensation would be provided to the producer for this major financial loss.

Beef producers could be affected in several ways. First, the legislation does not provide a clear differential between a veal calf and a beef calf, which could result in USDA attempting to inspect all beef operations. Second, the beef producer could see increased cattle placements if these calves were not placed on veal farms and were instead placed in feedlots to be fed to much higher weights. This would result in lower beef prices due to overproduction and a substantial reduction in income for cow-calf farmers due to decreased demand for their calves. The dairy farmer would suffer losses of income due to the loss of the major market for dairy bull calves. All of these would result in not only veal farmers going out of business, but also financial stress to dairy and beef producers.

The provisions for education and for inspection of farms and markets will result in large Government expenditures. This would come at a time when the Federal Government, and especially the USDA, is in a period of major budget constraints. If enacted, and no additional funds were provided, as stated, and this contradicts what precedes it, then not only would this program be improperly implemented, but other programs within USDA that truly have some need would suffer.

This legislation also would result in greater use of imported products that would not be subject to these requirements, higher consumer costs, and increased conversion of farm land if farmers go out of business.

The American Farm Bureau and the livestock industry are continually working with scientists and other groups to provide for and improve the care, feeding and handling of livestock. The new scientific information that results in greater care and improved feeding of our livestock is carefully and quickly implemented by farmers. We farmers are the ultimate animal welfare advocates, since our very livelihood is directly related to our animals' welfare.

Mr. Chairman, I thank you and the other subcommittee members for allowing me to present testimony on this important issue. Our comments are delighted to dispel some of the misconceptions related to animal agriculture. We urge your opposition to H.R. 84.

Thank you.

[The prepared statement of Mr. Landwehr appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Landwehr.

Mr. Lyman.

STATEMENT OF HOWARD LYMAN ON BEHALF OF THE NATIONAL FARMERS UNION

Mr. LYMAN. Thank you, Mr. Chairman. I shall be brief.

My name is Howard Lyman. I am representing the National Farmers Union.

I was raised on a diversified dairy farm in Montana. I spent 30 years of my life involved in feeding animals. I need to say that of all the types of feeding that I've been involved in, feeding veal calves is by far the most demanding.

When we look at H.R. 84, the bill, in our opinion, comes down to three things: the size of the pen, the diet, and inspection. As far as we're concerned, the pen and the diet are things that good operators can deal with. When we talk about inspection, that's the area that gives us the greatest concern.

If inspections are to be made, who will make them, when will they be done, what will the regulations be that the producer will have to put up with? We believe that this is probably the toughest part of the bill for the person that's out involved in beef cattle production today.

When we look at veal calves today, they will cost up to $200 each. Nobody goes out and spends that kind of money and then goes and abuses the calf. We are talking about dealing with a few bad apples and talking about looking into the whole barrel.

If we are going to deal with family farmers and veal calf feeding, we do not believe that anything that's in H.R. 84 would cause a family farmer any problem. What we are worried about is the future of what comes behind H.R. 84.

One of the things we should be looking at is that this problem is not going to go away. We need to get some factual data to deal with the future. We are going to have to do a public relations job with the consumer that's out there. They're going to have to know what we're doing, how we're doing it, and we're not doing a very good job right now. If we don't put some money, some time, and some effort into dealing with the public that's out there, the next bill that comes down will not be in front of the Ag Committee. We will be in front of another committee and things will be a lot tougher.

One of the things that we call for in our testimony is looking into the mental health effects of feeding and restraint on cattle. That's a "three dollar" way of saying something, that those involved in feeding cattle for many years have referred to as "shipping fever". If we do not get a handle on that statistical, scientific data, on the stresses involved in cattle on how we handle them, we will be back in front of another committee and we will have some city slickers deciding what we are going to do in the industry. Remember, whatever we do, the consumer is going to end up ultimately paying for it. So let's do what we do correctly. Let's do it with scientific data, and the sooner, the better.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Lyman appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mr. Lyman. Mrs. DeWall.

STATEMENT OF ARDATH DeWALL ON BEHALF OF THE ASSOCIATED MILK PRODUCERS, INC.

Mrs. **DeWall**. Good afternoon, Mr. Chairman, and committee members.

I am Ardath DeWall of Shannon, Illinois. I appreciate this opportunity to comment on H.R. 84, the Veal Calf Protection Act. The DeWall family, my husband, myself, and our two sons, own and operate a 220-acre dairy farm at Shannon. Our oldest son is a graduate of the University of Wisconsin and an active partner in the operation. Our youngest is presently a student at the University of Wisconsin and involved in the farm operations as his studies permit. This is totally a family operation with outside labor used only during peak seasons, such as haying season.

In addition to my responsibilities on the farm, I am a member of the board of directors of the Morning Glory Farms Region of Associated Milk Producers, Inc. I have served two terms as president of our region's AMPI women and I am active in American Agri-Women. I am currently president of the Agricultural Women's Leadership Network and a past member of the National Dairy Promotion and Research Board.

At the outset, I would like to make it clear that as a dairy farmer, my first concern is the welfare of our livestock. Our primary economic asset is our 60-cowherd of registered Holstein milk cows and the associated replacement stock which represents our future in the business. Over the years, we have made a large financial investment and devoted substantial time and effort to improving the quality of our herd.

Along with that is the constant attention to overall herd health. This takes many forms. The facilities must be clean and dry. The feed must be of high quality and free of residues. You have to be constantly on the alert for illness. You do all this as a producer because it is essential to your livelihood.

There is a more basic reason for most of us, I believe. We are in the dairy business and we are livestock producers because we enjoy working with animals and delight in a sound, healthy animal.

The legislation before this subcommittee today would direct the Secretary of Agriculture to develop standards of nutrition and management for the production of veal. Along with that, the Secretary would be responsible for an inspection system to assure adherence to the prescribed rules.

The legislation is of concern to dairy farmers as veal production represents a substantial market for many of the calves not retained as replacement animals. More basic is the concern that this can become an effort to assign to a Government agency responsibility for determining the type and style of management that may be used in animal agriculture. It is easy to envision extending the concept in the legislation to require the Secretary to prescribe the manner in which dairy cattle will be confined, how they will be fed, the type of milking system to be used, and to dictate other features of a management system.

A wide range of management systems are used on today's dairy farms. They are used because they have been found to fit the needs of the operator, they improve productivity, or simply because of personal preference.

In our own situation, our calf-raising operation is a major part of the enterprise. Calves are raised in a nursery environment in individual pens and hutches. The individual pens measure 4 foot wide and 6 foot long. The hutches are round fiberglas hutches which are 5 foot in diameter. We have found this the best means of maintaining cleanliness of the calves. Each individual can be observed and individual care provided, as needed, much better than if the calves are run together in a group. This latter point is important. Each animal is an individual. You don't deal with a herd of cows; you care for each one individually.

Our milk cows are handled in a stanchion barn for many of the same reasons. This affords an opportunity for individual attention, gives us a better handle on herd health, and allows closer attention to nutrition needs and other aspects of management.

With all due respect to the Secretary and his personnel, efforts to dictate management styles, feed systems or other operating techniques for the individual operator is perhaps the best way to set agriculture back a good deal and to raise consumer food costs in the process.

We have been able to dramatically increase productivity in the diary industry because the individual producer has been free to experiment with new technology, to try new management techniques. The result is a national dairy herd that produced 14,200 pounds of milk per cow last year, compared with about 5,300 pounds in 1950.

At the same time, the real cost of milk and dairy products has declined sharply. In 1950, the average worker needed 16.1 minutes of work to buy a half-gallon of milk. In 1987, 6.9 minutes did the job. A pound of American cheese cost 21.6 minutes of labor in 1950, but only 16.3 minutes in 1987. Across the board, the cost of dairy products to the consumer today represent a real food bargain.

For those concerned about production conditions on the dairy farm, I can assure you we are inspected regularly with respect to sanitation of the production facility, cleanliness of the animals, and related production conditions. Herd health is a constant concern of public health authorities where our milk is marketed. The milk itself is routinely sampled for purity.

This brings us back to where I started. In order for my family to remain in the dairy business, we have to maintain the health and welfare of our herd. The term "Milk from Contended Cows" is more than a clever advertising slogan. The only way to maintain a high-producing, efficient dairy herd is to use all the management knowhow at your command to make certain they are fed right and otherwise cared for in a sound manner.

Thank you.

[The prepared statement of Mrs. DeWall appears at the conclusion of the hearing.]

Mr. OLIN. Thank you, Mrs. DeWall.

Next is Mr. Fleishman.

STATEMENT OF JACK FLEISHMAN, PRESIDENT, BERLINER & MARX, ON BEHALF OF THE AMERICAN MEAT INSTITUTE

Mr. FLEISHMAN. Thank you, Mr. Chairman.

My name is Jack Fleishman. I am president of Berliner & Marx. Our company slaughters and processes veal for the domestic supermarket and restaurant trade, and we export to as far away places as the Far East and Europe. Our operations are located in Wisconsin, Indiana, and New York.

Today I am representing the American Meat Institute, the national trade association for meatpackers and processors. AMI members slaughter and process over 80 percent of all meat products produced in the United States. A number of AMI members consist of veal packers, processors, and distributors.

The American Meat Institute views H.R. 84, the Veal Calf Protection Act, as totally unnecessary and of such a restrictive nature that it could virtually destroy today's formula-fed veal calf industry and, in the process, severely disrupt the livelihoods of the thousands of people associated with it.

If this happens, we, the Nation's veal packers and processors, would face the prospect of shrinking supplies and higher procurement costs. Certainly, we would no longer be able to supply the American public a wholesome, nutritious product at the most favorable price. The question is, Should Congress pass a law that would curtail production of and greatly raise consumer prices for veal? I believe that would be a step backward.

In addition, this bill would have a crippling effect on the dairy industry. Dairymen, already facing financial problems, would face decreasing revenues from the more than 1 million calves that now go to feed and from the millions of pounds of whey that are fed to those calves.

There is also another and greater danger. The mandatory provisions of this bill threaten animal agricultural in general. Giving Government the right to dictate how American producers raise veal calves would set a dangerous precedent that could quickly escalate to all animal agricultural production. Ivory tower theories are a long way from practical production techniques.

AMI's longstanding policy is that all livestock purchased by our members should be treated and handled in a humane manner. It is in our industry's best interest, and a necessary part of maintaining our economic viability, to purchase healthy, well-cared-for animals. To do otherwise would severely restrict our ability to compete in this marketplace with other high-quality protein foods that are available to today's consumer.

Berliner & Marx and other veal slaughterers set forth buying practices that expect all veal calves to be raised in accordance with established production guidelines and applicable laws. AMI worked cooperatively with the American Veal Association to develop the publication "Guidelines for the Care and Production of Milk Fed Veal Calves." AMI endorses these guidelines, as well as the American Veterinary Medical Association's "Guide for Veal Calf Care and Production." These producer-developed programs provide humane treatment for veal calves and assure the public a safe and wholesome product. The proposed mandatory legislation would provide no additional benefits.

All packers operate under the Humane Slaughter Act and are regulated by the Food Safety and Inspection Service. We are required to treat all animals coming into federally-inspected facilities in a humane manner. Simply stated, our industry, like the vast majority of animal producers, is committed both legally and ethically to the humane welfare of animals we purchase.

In summary, the American Meat Institute and Berliner & Marx are committed to the humane welfare of veal calves. We take an active role in developing good veal calf raising practices and work closely with growers, feed companies, and veterinarians to ensure the enforcement of these principles through member buying practices.

Mr. Chairman, the bottom line of H.R. 84 is simply this: it would greatly restrict veal production without any tangible benefits. We urge you and your colleagues to reject further consideration of this unnecessary legislation.

Thank you for the opportunity to present our views on this Veal Calf Protection Act. I will be happy to answer your questions.

[The prepared statement of Mr. Fleishman appears at the conclusion of the hearing.]

Mr. **Olin**. Thank you, Mr. Fleishman.

The last member of the panel, Mrs. Greiner.

STATEMENT OF SANDY GREINER, PRESIDENT-ELECT, AMERICAN AGRI-WOMEN

Mrs. **Greiner**. Thank you.

My name is Sandy Greiner. My husband and I own and operate an environmentally controlled farrow-to-finish hog operation in southeast Iowa, near Keota.

I am president-elect of American Agri-Women, which is a coalition of farm, ranch, and ag businesswomen. AAW was established in 1974 by women seeing the need to tell the real truth about American agriculture.

Thank you very much for allowing me this opportunity to offer our testimony today on behalf of AAW on H.R. 84.

Animal rights is an issue of high priority with my members. Several aspects of H.R. 84 are especially disturbing to us.

We feel that legislating the size of pens is an unnecessary step. Research has shown that negative stress imposed on animals results in a much slower growth rate. It would be nothing short of economic suicide for a farmer to intentionally expose his animals to undue stress.

We are also concerned about establishing any further legislative guidelines on feeding livestock. Livestock diets are currently more highly restricted than human diets. Additional regulations would impose unnecessary restraints on our producers.

Farmers and ranchers are the original animal welfare advocates. As you know, the midwestern climate is one of many extremes. I could speak volumes, citing examples of heroic efforts by livestock producers to relieve their livestock from the stresses of extreme weather conditions. Farmers and ranchers often risk their own lives to reach livestock stranded by winter blizzards in order to secure their stock and make sure that feed and water is available.

As we speak today, water supplies are getting extremely low in southeast Iowa. In many instances, there is water available for livestock sustenance, but not enough to maintain a real comfort level. Many producers re-reducing livestock herd sizes in order to ensure that their remaining livestock enjoy an abundant water supply. I think these examples demonstrate that farmers, for the most part, are more concerned with the welfare and well-being of their animals than they are the almighty dollar.

We in the livestock industry have the ability to police ourselves, through peer pressure, rather than having additional restrictions placed on us. Many examples can be cited of a livestock farmer reporting animal abuse by neighbors. American Agri-Women applaud those farmers and ranchers with the courage to report to the proper authorities animal abuses that have occurred in neighboring operations.

As Christians, we understand our responsibility to protect our livestock herds from undue stress.

Passage of H.R. 84 could set a precedent for the production of other livestock species and, carried to extremes, the passage of this bill might lead to unnecessarily high food costs to the consumer.

In conclusion, American Agri-Women oppose H.R. 84. We offer our assistance to this committee to ensure that all species of livestock continue to receive the finest in animal husbandry care. We believe that through the efforts of this subcommittee, and America's farmers and ranchers, we have sound methods in raising livestock that are not only humane, but also provide a healthy and wholesome diet for the American consumer.

Thank you.

[The prepared statement of Mrs. Greiner appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you. I thank all of you.

Mr. Olin.

Mr. OLIN. I just had one comment, not a question.

I know that members of the panel have strong feelings about this bill. Of course, this is not the last time this subject is going to come up, undoubtedly. I know that you all appreciate and recognize the help that you can give the country and all of agriculture, in helping us on this committee and everybody else to bring the facts to the public as best you can when these issues come up—scientific facts, data that demonstrates that agriculture is doing a responsible job with regard to the care and feeding its livestock. So I hope you all, when you leave this meeting, will remember that, whenever you can, tell your story, not in an emotional way but in as factual a way as you can, because you've got in the facts, in my view, quite heavily on your side.

Mr. **STENHOLM**. Mr. Grandy.

Mr. **GRANDY**. Thank you, Mr. Chairman. I want to associate myself with the remarks of the gentleman from Virginia and also particularly welcome a constituent of mine, Miss Connie Greig, who not only lives and feeds cattle in my district, but also serves on my farm advisory committee. If she is abusing her animals, then everybody is abusing their animals in Iowa. I can assure you that that is not the case.

Let me just ask one general question—and this is addressed to all of you because most of you are producers. How much contact have you had with animal welfare advocates coming on to your farms and observing either your hog operation, your cattle operation, your veal operation, or your dairy operation? Because obviously, you are clearly the "black hats" in this scenario. How much on-site inspection by the people that are accusing you of inhumane activity have you had in terms of the direct observation of your facilities?

Jump right in.

Mrs. **GREINER**. We have had no one present. We have invited no one. However, due to health problems, and the fact that we have been through quite a bit of trouble with eradicating pseudorabies on our pork farm, we don't allow our children's house guests to enter our building.

Mr. **GRANDY**. But my point is, you have never had an overture from any of these animal rights groups to come and witness a hog confinement center or——

Mrs. **GREINER**. We live on a major highway and we have had situations where people come to the door, supposedly with car trouble. You're aware of what happens in rural America. They stop for gas. You know, they're 5 miles from the station and they're out. They have expressed an interest, but we have never felt secure in letting strangers inside our operation.

Mr. **GRANDY**. But you have nothing to hide, right?

Mrs. **GREINER**. No. But what do I have to gain by allowing a stranger to make himself familiar with my operation, when with one pull of a cord he could sabotage the whole thing by pulling the electricity.

Mr. **GRANDY**. So you actually fear this kind of behavior from somebody who would be an animal rights activist?

Mrs. **GREINER**. I most certainly do. I'm not desperately afraid of it, but I have a healthy respect for what could happen.

Mr. **GRANDY**. So, in a sense, you are frightened by some of the activities of these people?

Mrs. **GREINER**. I'm very much aware of what's going on.

Mr. **Grandy**. Were you going to say something, Connie? You were pulling the microphone up.

Mrs. **Greig**. Well, I wanted to refer to that picture of the Holstein calf in the crate. I think we're all aware that a picture says a thousand words. I have often used as an example—we breed artificially, and I never select a bull based upon his picture because you're selecting the best photographer.

You know, if someone went into one of our hospitals and took a picture of a seriously ill child, that picture might be distorted by people who try to interpret a picture as if this is the way we treat our children in the United States. I think probably that's the sort of thing we have to worry about in rural America.

There isn't much point in demonstrating in Estherville, Iowa, because there's nobody there to watch you.

Mr. **Grandy**. I agree with you. It's disturbing to me. I don't sit on the livestock panel, but this is a combined hearing with the Department Operations, Research, and Foreign Agriculture Subcommittee, which investigates pesticide residues and ground water contamination. The tendency toward rhetoric as opposed to reason over the last few months—whether we're talking about Alar or food safety, or whether or not we can even use an economic criteria to assess the level of pesticide contamination—indicates that what you are doing today is probably something you're going to have to repeat many, many times, because I think we are seeing a tendency right now to accuse first and ask questions later. So I thank you all for coming and I appreciate your scientific and also very humane response to these allegations.

Thank you, Mr. Chairman.

Mr. **Stenholm**. I have no questions for any of you. I appreciate very much your being with us through a very long day.

I have just a couple of comments and observations.

If you listen to the tenor of the statements on this particular panel, you were all saying the same thing in your own way. You all represent different organizations.

I very much appreciate all of the testimony, not only this panel but every other individual who has been before us today, expressing their viewpoint.

The concern that I have, and so many on the Agriculture Committee now share, is that in many of these areas, we have some problems with perception which could translate into a very real economic problem for the production side of agriculture. We have well-meaning individuals, as we have heard today, that would like to see certain technologies eliminated because it offends them. They allege that they speak on behalf of all of the American people. I very much like what I heard today regarding research efforts now being funded by various producer check-off programs.

I hope this hearing today, and those that will come over the next several months, will begin not only to build a record to be used by this committee and the entire Congress, but also will begin to build the kind of public relations effort that I've heard you in the last 30 minutes talk about. How much better the evening news would be if it at least presented a balanced story of what we discussed today.

I think we have found today that there's a lot of concern about antibiotics, their utilization, and possible misuse. It's in our best interest that we get a handle on the problem.

I started out today by saying, show me an individual producer that abuses their animals and I'll show you a broke producer.

Now, somehow, some way, the public perception surrounding your industry needs to be improved.

Thank you very much for being here.

I call panel number seven, Mr. Desens, Mr. Dodge, and Mr. Brown. I recognize Mr. Desens.

STATEMENT OF RON DESENS, VEAL PRODUCER, LITCHFIELD, MN

Mr. **Desens**. Good afternoon. I am a farmer from south central Minnesota. My wife and I operate a 300-acre diversified crop and livestock farm, which includes a 100 head dairy beef herd. We market the meat from this herd directly to our own customers.

Three years ago we became familiar with the concept of "free range veal" and we began producing it at the request of some of our customers. We buy bull calves from neighboring dairy farms and house them in 4 by 8 foot hutches with attached pens that give them a total living area of about 100-square feet. Calves that come from the same farm are usually kept in pairs.

Their diet consists of fresh goat milk from our dairy goat herd, free choice water, and free choice, nonmedicated feed, which we mix ourselves. The feed is made from our own corn, oats, and extruded soybeans, with a purchased vitamin/mineral supplement.

Antibiotics are administered only if the calf shows signs of sickness, and only federally-approved medication is used. At 2 months of age, the calves are moved to a large group shelter with about a half-an-acre of pasture.

After slaughtering the veal at 16 to 20 weeks of age, and a live weight of about 325 pounds, we direct market the meat to some of our 400 established customers and to new clients that we meet at local farmers markets. We explain our production methods to these customers and, in our opinion, the response has been very positive.

Direct marketing is different from shipping to stockyards, and it's different than wholesaling to a restaurant or supermarket. We meet our customers face to face and we get to know some of them quite well. Through this process, it has become abundantly clear to us that there is a very significant if not huge consumer resistance to some practices commonly used in the veal industry, especially the practice of raising the veal in crates. This resistance does not appear to be confined to a small group of people but, rather, it is widespread among the meat-eating public.

Based on our experience, we think that the passage of H.R. 84 would reduce this consumer resistance and generally increase the sales and profits of veal producers in particular, and the cattle industry as a whole. If the accomplishments of our farm are any indication, surely the vast resources of American agriculture can quickly be mobilized to increase the public's approval of veal.

Thank you for your time.

[The prepared statement of Mr. Desens appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mr. Desens. Mr. Dodge.

STATEMENT OF RUSSELL E. DODGE, JR., LIVESTOCK PRODUCER, WHITEWATER FARM, NEW SHARON, ME

Mr. **Dodge**. Mr. Chairman, committee members, I greatly appreciate the opportunity to speak to you today about this important issue.

I have been a diversified livestock producer for the past 14 years. I have successfully raised freezer pigs, Holstein replacement heifers, feeder cattle, draft horses, Registered Polled Herefords, and veal calves.

I would like to depart from my written remarks for a moment and just say that I also think of myself as a "mainstream" farmer. I belong to the American Polled Hereford Association, the National Farmers Organization, the Farm Bureau, and I'm a member and director of the Maine Beef Producers Association.

Presently, I have a contract with the Food Animal Concerns Trust to raise veal calves for the Bread and Circus supermarkets in the Boston area.

Briefly, I would like to explain my husbandry and health practices concerning these veal calves.

The calves are obtained directly from local dairy farmers. Upon receipt, all calves are vaccinated for respiratory diseases and given a vitamin shot. New arrivals are housed in a separate room for 3 to 4 days so that the calves can be acclimated and observed in the least stressful environment.

Calves are then placed in the first pen of 5, in a group of 8 to 10 calves. They receive free choice, acidified milk replacer, hay, water, and a calf-starter grain. As the calves proceed through the pens at approximate 4-week intervals, the amount of grain, water, and hay available to them is increased, while the milk replacer is available but in diluted form, the reason being because of the increased cost of the milk replacer. Presently, I am paying $11 a hundredweight for my grain and $80 a hundredweight for my milk replacer.

At approximately 20 weeks the calves are sent to the slaughterhouse and marketed through the Bread and Circus supermarkets. The live weight of these calves is approximately 350 pounds.

Next I would like to outline some important facts concerning my operation. The first area is housing. The calves are housed in a converted dairy barn, the dimensions being 60 feet by 32 feet. Each calf has approximately 32-square feet of space inside the barn, based on 8 calves per pen, plus an additional 126-square feet of pasture/yard area per calf, and an additional pasture is also available.

I would like, with your permission, Mr. Chairman, to submit a diagram of my barn and the yard areas in the written testimony.

Mr. **Stenholm**. Without objection. If you submit additional material later, we will place it in the committee files.

Mr. **Dodge**. Thank you.

The second area of concern is feed. The milk replacer is a quality, nonmedicated, partially acidified product, dispensed through a self-feeding nipple, which is available to the calves 24 hours a day. The calves are fed a commercial calf-starter grain until 8 weeks, when it is mixed half and half with flaked corn. Each calf consumes approximately 10 pounds of grain each day from 9 to 20 weeks of age. They have free access to hay, water, and also grass in the summer.

The last area of concern is that of health. My calves are normally healthy, but if and when I do have to provide medication, it is done on an individual basis and only for a very limited amount of time. Detection of sick calves is obvious in this system, as they do not display normal patterns of behavior when sick.

In conclusion, I strongly believe that this method of raising veal is a viable and humane alternative. We can provide a quality animal food product with minimal use of drugs and maintain the calves in a healthy environment.

I would like to invite the committee members and the chairman to visit Maine and come to my farm. Perhaps you could come along when President Bush comes up some time.

Thank you.

[The prepared statement of Mr. Dodge appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Dodge. All he has to do is invite me.

Mr. Brown.

STATEMENT OF ROBERT A. BROWN, PRESIDENT, FOOD ANIMAL CONCERNS TRUST

Mr. BROWN. My name is Robert A. Brown. I received degrees in biology from Harvard University and Northwestern University. I have held a number of positions in biological research, including the position of research manager for the Institute for Research in Animal Behavior. I spent some time on the curatorial staff of the Bronx Zoo, and I held another position more recently for 7 years in which I was supervisor of a full-service veterinary hospital.

In 1982, I founded the Food Animal Concerns Trust. The purpose of this not-for-profit organization is to promote appropriate technology in livestock and poultry husbandry. By that I mean, appropriate for the animals, appropriate for the farmers, and appropriate for the ultimate consumers of the product.

The previous witness from Berliner and Marx need not worry about me as an ivory tower theoretician. We don't sit behind a desk and say how farming is done. We find farmers like Russ Dodge here to follow our standards, and we do really a substantial amount, I think it's fair to say, of applied research in appropriate technology with veal and also with other species of farm animals.

Since the time is so short, I am going to address just one part of this bill, and that is its requirement that some solid feed or roughage be given to these calves. There are basically five reasons why this should be done—and I'm just going to go through them quickly.

First, is that in the normal situation in cattle, the calf is born on the range, suckles from its mother, and it starts to nibble some roughage within the first 2 weeks of life. Sticking to the normal patterns is always the best thing to do. To give them no solid feed at all is a great departure from the normal pattern. That's the first reason for solid food.

Second, milk doesn't contain any iron but solid foods do. So by requiring solid food, you will get rid of the severe anemia problem—which I would be glad to answer questions on—that these calves have.

The third reason for solid foods, as alluded to by Mr. Dodge, is that they are much cheaper than liquid foods. This enables the farmer to lower his overall feed costs. The saving depends really on how much milk versus solids he gives. But he has something that he can control and he gets many more sources of feed than he has now. It puts him a little bit back in the driver's seat.

The fourth reason is something that I think should be of great interest to all of you, and that is, as mentioned in earlier testimony, when roughage is given, the rumen develops. When roughage is not given, the rumen does not develop.

Now, this means that the solid food provision has no incremental enforcement costs to the U.S. Government. The reason is that the USDA inspectors routinely examine the stomach on all of these animals that are slaughtered. If by this bill or elsewhere they are given authority to do so, the inspectors simply could condemn carcasses where there is nothing in the rumen or where the rumen hasn't started to develop. You don't have to go to a farm to check this.

The fifth thing, which I know is of concern to everyone on the subcommittees, is that when the rumen remains undeveloped, drugs are metabolized differently. This was suspected from various findings in the literature. The FDA got worried about this about 5 years ago. Anyway, they did initiate one study, which we have known the results of now for about 3 years, but we just have the paper in hand today. That was a study of the drug sulfamethazine. They found that the withdrawal time of sulfamethazine is twice that in the nonrumenating, liquid-fed calf as it would be in a calf that had a normal, solid diet. This was not a good finding for the veal industry.

Based on this bit of evidence, the FDA now has the firm opinion that there are no drugs that are approved for liquid-only calves. There simply are no drugs approved for these animals at all. This is a unique situation in livestock today. No other class of livestock is in this untenable position of having no drugs at all that can be used.

Now, since all formula-fed calves must be given drugs, such calves are now actually being raised in violation of the Food, Drug, and Cosmetics Act. It is our position that this is actually the case today.

There is only one, economically-feasible way to get out of this mess—and they're in a big mess—and that is to give them solid food. Because the other alternative is to start doing new drug applications on all the drugs they need to raise them this way, and it just can't be done. I don't think the drug companies are going to undertake the expense for such a small number of calves.

I see the red light on, but there are a couple of other things. I did want to tell Mr. Stenholm—he asked earlier what the worst finding was in these residue studies. I happen to know. It's neomycin. It was a finding of 132 parts per million. The allowable tolerance is

0.25 parts per million. So there is approximately 530 times the allowable amount. That's the worst thing in that batch of data.

Mr. STENHOLM. How many times was that found?

Mr. BROWN. I believe just once, because it's the upper range and it was the worst—only one of those calves had 132 parts per million.

I could, if you want, tell you a little bit about how you get drugs on a veal farm. This is a catalog that I got in the mail because we are veal producers. It's a 1989 spring flyer from a company that distributes drugs. And on page 3 they offer 25-pound bulk nitrofurazone. That is a substance that is not approved for any cattle, and it would never be approved for veal calves. Vealers want it, but FDA says don't bother us because it's a carcinogen. So you call the distributor up on the 800 number, and you say I'm a veal farmer and this is my "Master Charge" card and they send it to you. I didn't order 25 pounds. I didn't want to lug it down here. I have one pound here in a zip lock bag—it's a yellow powder—because this bag was punctured, and I got some on my hands when it arrived.

In regard to the 3.2-percent residue level they're finding in these fancy calves, that's got to be a low figure, because there is no way they can look for residues of a substance like this, which isn't supposed to be used in calves at all. I would refer the committee to the FDA's 1983 survey of banned and unapproved drugs on veal farms. The last table of the paper lists what the drugs they found are, in fact, approved for. I'll just give you a little idea.

The first one is for dogs, not for use in food animals. The next one is for chickens, the next one for baby pigs, the next one swine only, then turkey poults, newly hatched chicks, pigs, chickens, swine, mink, swine, poultry—and here's a great one—turkey egg dip. Now, we know pretty well in looking for illegal residues they didn't look for residues of a turkey egg dip.

Thank you very much.

[The prepared statement of Mr. Brown appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mr. Brown. Mr. Jontz.

Mr. JONTZ. I have no questions.

Mr. STENHOLM. Mr. Olin.

Mr. OLIN. Thank you, Mr. Chairman.

I was a little bit confused by Mr. Brown's testimony. I had a hard time following it.

Mr. BROWN. I'm sorry.

Mr. OLIN. Give me a couple of sentences that would give me the gut of what your message is.

Mr. BROWN. Well, I talked about the requirement in the bill for solid foods, for some roughage, and I gave the five reasons of actually why this is a good idea.

Mr. OLIN. You think that solid food——

Mr. BROWN. I think it's a particularly good idea for this drug problem, because it's really the only way they're going to get a list of approved drugs for these calves. Once you give them the solid food, then the approvals have been done and new drug applications have been done. They have been submitted and approved.

Mr. Olin. Is it your position that there is something wrong with the calf if it doesn't get roughage?

Mr. Brown. Yes. The rumen doesn't develop normally.

Mr. Olin. So what is the danger of that?

Mr. Brown. Well, we heard Dr. Saville's testimony earlier, that they tend to get hairballs. The solid food, as I mentioned in my testimony, also takes care of the anemia problem, because there is iron in all these solid feeds.

Mr. Olin. The subject I'm trying to get at is, is the lack of solid food going to produce a calf that is dangerous to the consumer necessarily?

Mr. Brown. Oh, there are five reasons why I stated it's a good provision in this bill. It is the normal feed; it provides the iron; it lowers the cost of feed for the farmer; it is a provision which can be enforced by existing inspection in the slaughterhouses; and finally, it will get rid of this terrible jam the industry is in by virtue of the fact that they have no approved drugs for these calves.

Mr. Olin. You still haven't answered my question. My question is, is the lack of solid food——

Mr. Brown. Bad for the calves, you mean?

Mr. Olin. Is it bad for the calf? Does the calf end up giving meat that's bad for the consumer, or are you talking just about a desirable choice for the farmer? You just think it's a good idea to have——

Mr. Brown. I think it's a real essential provision of the bill.

Mr. Olin. And why is it essential?

Mr. Brown. For the reasons that I stated.

Mr. Olin. For economic reasons, you mean?

Mr. Brown. Well, you don't have—you see, with these calves now, there is nothing approved so no one knows what the withdrawal time should be; no one knows how long these drugs hang up in the tissues of these animals. By giving them solid food, because the new drug applications on a calf that receives solid food have been filed and approved, there's a lot of drugs out there you can use.

Mr. Olin. You're saying basically there is nothing about this subject that is going to produce meat that is dangerous for people to eat? That's really what you're saying, that the reasons for pushing the solid food content is other than the safety of the food?

Mr. Brown. Safety of the food is a real big reason right now.

Mr. Olin. You're not being very convincing on that point.

Mr. Brown. I'm sorry. I don't know what else to say. The only drugs approved for calves have been done so, on calves that receive solid food. If they don't get any solid food, the withdrawal times and everything change completely and they have no idea what they should be.

Mr. Olin. I have been sitting here all day long hearing about antibiotics that are fed to calves. You're saying that is something that's illegal, impossible, is not done?

Mr. Brown. According to FDA's current position, what goes on in the formula-fed industry is now illegal, right. We have no drugs approved for those animals.

Mr. Olin. That's a little confusing at this point in the day, having heard about 20 people testify to the fact that we're using antibiotics to varying degrees—some people think too much—but almost everyone talked about using antibiotics to improve the health of the calves.

Well, I don't want to pursue that any more, Mr. Chairman. I'm sorry. I'm not quite understanding your point.

Mr. **Stenholm**. Mr. Dodge, you make a very strong argument that the system that you use is, as you say, a viable and humane alternative.

Do you mean to infer that other methods are not adequate?

Mr. **Dodge**. I think that I would like to answer in the affirmative, sir, and say that I believe I'm putting a plug in for my system, that it is a viable alternative. I do not personally believe in housing calves in crates. That's my personal view.

Mr. **Stenholm**. Were you aware that the drugs that you're using in your operation during the first 4 weeks are illegal?

Mr. **Dodge**. The drugs that I use—I have a very close working relationship with my veterinarian and, as far as I know, sir, they are legal.

Mr. **Brown**. Excuse me. He feeds solid food under our system, so we have plenty of drugs cleared. I have letters from FDA approving the drugs that we use.

Mr. **Stenholm**. The difference is the solid food?

Mr. **Brown**. That's it.

Mr. **Stenholm**. In your opinion.

Mr. **Brown**. That's the key.

Mr. **Stenholm**. I don't believe I have any other questions. Thank you all very much for your appearance here.

I call panel No. 8: Miss Huffman, Mrs. Lindgren, Mrs. Zeosky, Mrs. Pratt, Miss Cooper, Mrs. Compston, Mr. Wright, and Miss Spader.

We will first hear from Mrs. Pratt.

STATEMENT OF JODY PRATT, VEAL PRODUCER, ST. CROIX FALLS, WI

Mrs. **Pratt**. Dear members of the ag subcommittee: my husband and I are very concerned about the impact bill H.R. 84 will have on our business, for two reasons. The first is that we are independent veal growers and this bill would put us out of business. It would force us to cut our production by two-thirds, which would not be possible, as we financially would not be able to meet our debts.

My second reason for concern is the fact that Mr. Bennett introduced the bill based upon viewing "Misery on the Menu", which was partially filmed on our farm. We object to the bill being based on an inaccurate television story which was a sensationalized story to boost television ratings, instead of being based on scientific research and veal grower extensive experience in raising calves.

We have raised calves for 10 years and run a family farm operation where our two small sons help us in the barn daily. We were raised on farms and took agricultural courses in school. We rely on updated industry research and common sense in raising our calves in the most humanely, comfortable, and productive way possible. We would not put a calf outside in our Wisconsin winter climate, no matter what anyone says.

Mr. Steve Wilson, a reporter from KARE–TV, Minneapolis, Minnesota, contacted us at the beginning of August 1986 about doing an educational story about "Life on a veal farm." He told us he had obtained our name from the packing plant where we sell our veal. The packing plant confirmed that and repeated that Mr. Wilson was planning on doing a story on the farm life aspect.

We should have known we were in trouble when Steve Wilson asked the difference between a bull and a heifer calf.

We, as veal growers, believe the miniseries was misleading, one-sided, incomplete, inaccurate, and sensationalized. We would like to explain some of the vivid images seen.

First, the calf scene. The scene is used repeatedly throughout the series. The fact was that the calf was, in fact, scared and intimidated by the bright lights of the television camera and the cameraman standing so close to him, when everything is so new to the calf.

The calf, depicted as being crippled at the time for marketing, was in actuality being inquisitive about the sudden new territory. Its leg was merely at an awkward position. It is never stated that this calf has had 16 weeks in his designated space and was acclimated to his own pen. The calf was merely unsure of which direction it was expected to go and they usually smell or sniff where they're going first.

The final segment showed a roomful of empty chairs and listed the names of organizations and corporations that declined to be present. We were uncertain about attending and finally decided not to, due to the experiences we had with the final stages of the series production. After viewing the last segment, we believe we made the right decision in not attending.

The editing used terminology that led viewers to a negative impression even before viewing the series. The terminology was very negative and biased against the veal growers. Such expressions included "what you don't know could ruin your appetite, astonishing practices, harsh treatment, meat that may not be fit to eat, environment that breeds death and disease, basically not a safe product, miserable conditions," not to mention the very title of the series, "Misery on the Menu."

He did not mention once the high nutritional value of veal. He also omitted the costs of veal production, the basic animal husbandry involved, and the industry's explanation of the system. Steve Wilson was very selective with his choice of words to make people who viewed this series question our ability to care for these animals.

We filed a complaint against Steve Wilson and KARE–TV Minneapolis, Minnesota, with the Minnesota News Council. We didn't have a legal recourse. Every statement made in the series was implied.

We are proud of the way we take care of our calves. Thank you.

[The prepared statement of Mrs. Pratt appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mrs. Pratt. Mrs. Huffman.

STATEMENT OF BARBARA HUFFMAN, PRESIDENT-ELECT, AMERICAN VEAL ASSOCIATION

Mrs. HUFFMAN. Mr. Chairman, members of the subcommittee, my name is Barbara Huffman. I am the president-elect of the American Veal Association and the past president for two terms of the Wisconsin Veal Association, the 1987 Wisconsin Farm Woman of the Year, and a substitute school teacher. Last, but not least, I'm a family farmer, and my husband, my three daughters and I raise veal calves. We have two barns in which we raise 470 calves every 4 months.

Before I was married, and before I had children, I often criticized my mother, telling her the way I thought she should raise my four younger brothers and sisters. After I was married and had my own children, and "walked a mile" in my mother's shoes, I understood. I now had the experience and the expertise, whereas before I had no idea what it was really like.

Despite the critical problems existing in the world—hunger, starvation, homeless people, Government problems here and abroad, deaths, drugs, AIDS, and our elderly—I am grateful for you to take the opportunity today to listen to us, giving us the time to assure you of the fact that veal farmers raise healthy calves in a humane environment with the best interest of the calves in mind.

Veal calves are raised by concerned family farmers, fully aware that our success depends upon the well-being of our calves. We must keep in mind that what we're discussing here today is calf husbandry, animal husbandry, not whether or not we should eat meat.

Calves are housed in individual stalls for many reasons. The bill, H.R. 84, is proposing standards for calves, dimensions for housing, which comes from the "Guide for the Care and Use for Laboratory Animals," page 16, table 2-1, which outlines the dimensions for dogs used in laboratories. It has no application whatsoever to veal calves.

The stalls—and I say stalls—not crates. Years ago, when the veal industry first started, we may have used something that may have resembled something more like a crate, a full-sided enclosure open in the back. Today, what we have is a stall, a mere partition at the shoulder area separating each calf. It in no way resembles a crate.

Adequate room is provided for the animal to stand up, to lie down, to turn his head to groom himself, and to assume the normal postural adjustments. We rent out our pasture in the summer to a neighboring farmer, and you can witness at any time any one of his cows or his calves, with plenty of room, laying on their legs. This is the normal bovine position.

We feed our animals a nutritionally-complete, milk replacer formula, and the calves thrive, as is evidenced by the 2½ pound a day, on the average, weight gain. The health of our calves is of utmost importance to us as well as all veal farmers. Complying with guidelines set forth by USDA, FDA, FSIS, we're working closely with veterinarians, implementing a vet/client relationship—encouraging this—using prescribed medications when necessary.

Furthermore, we have developed, in conjunction with veterinarians, animal scientists, animal nutritionists, and veal farmers, the American Veal Association guidelines for the care and production of veal calves. We have recently developed and shared with USDA, FDA, and FSIS a quality assurance program which we have already begun in a pilot program. This is to ensure that all calves shipped from our farms will be healthy, wholesome calves and meet regulations and specifications set down by the Government.

I am concerned about H.R. 84 because of the negative impact and dangerous precedent this would set for all of animal agriculture. I am concerned because it does nothing to enhance the welfare of my calves but would, in fact, be detrimental. I am concerned because, if enacted, it would put my family out of business. Veal farmers are not subsidized, we are not diversified, and we would be out of business.

On my farm, for example, one barn holds 50 calves. If enacted, this bill would say that we could only raise 15 calves in that barn. We couldn't do it. In the other barn we have 420 calves. That would reduce our capacity to 140 animals, unless we were subsidized by another organization or by the Government, we would be out of business.

Most of all, I'm concerned because H.R. 84 is based upon emotions, perceptions, and misinformation, such as seen in "Misery on the Menu." Changes forced by those lacking experience or expertise in sound animal husbandry practices could only lead to higher costs for the farmer as well as the consumer, inefficient systems, and a decline in animal welfare.

The AVA, over 1 year ago, stated as a matter of public policy that we encourage research in veal production. Our industry has evolved to our current practices based upon our own research and daily experience and reality. We encourage research, reliable research. We're not afraid of it. We want it. If there is anything that shows that there's a better way of doing this and still would allow us to make a living without being subsidized, we welcome this. If research indicates changes should be made, we want to know because it would be in our best interest to do so. But changes should be based only on sound, scientific research.

We're proud of our accomplishments, including health management, the high livability rate of our calves, our excellent animal care, and our quality end product. We allow for our calves shelter and warmth in the middle of the winter, keeping in mind that the majority of milk-fed veal calves are raised in cold climates where it's often 44 below zero with the windchill factor. Our animals are raised in barns 65 to 70 degrees. We allow for their health care and for their safety.

It just doesn't make any sense that we wouldn't take the best care of our animals that we possibly could. It just doesn't make any sense, gentlemen.

H.R. 84 would put the milk-fed veal industry in the United States out of business and will render hundreds and hundreds of thousands of Holstein bull calves useless. They will become, once again, unwanted by-products of the dairy industry.

What the American Veal Association is encouraging is clearly education, not legislation. Education when and if needed for the farmers. Education for the consumers—because as we've heard so many times today, perception, incorrect perceptions.

I would welcome any questions. Thank you.

[The prepared statement of Mrs. Huffman appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mrs. Huffman. Mrs. Lindgren.

STATEMENT OF JANE LINDGREN, PRESIDENT-ELECT, AMERICAN NATIONAL CATTLEWOMEN, INC.

Mrs. LINDGREN. My name is Jane Lindgren and I am a beef producer from Joliet, MN, and president-elect of the American National Cattlewomen. I would like to thank Congressman Stenholm, Congressman Brown, and the committee members for the opportunity to testify today in opposition to H.R. 84.

My husband and I have a private cattle feedlot as well as a cow-calf herd. We are very proud of our cattle operation. They have been our livelihood for some 40 years.

Animal husbandry is one of the oldest professions on Earth. The tradition of livestock production is a very demanding business, fraught with many problems, perils and risks, including the unpredictability of weather, markets, politics and laws.

Cattle people are known for their integrity. Transactions amounting to thousands of dollars are made with no written contract. Their word is their bond and their contract. This same pride and integrity is carried into our manner of handling and caring for our cattle.

The health and well-being of our cattle is of primary importance to cattle producers. It is our livelihood. If the cattle suffer or die, believe me, we also feel the pain and suffer. As research and experience reveal new and improved ways of beef production, we will gladly cast aside our traditional methods and embrace new ideas and practices.

As a woman involved in the beef industry, and today representing some 30,000 women cattle producers, let me assure you that the nurturing and protective instincts we project to our family members are also extended to our livestock, realizing, of course, that they are production animals and not companion animals.

I guess that you can say cattle people are the original animal welfarists, always have been and always will be. We just haven't felt the need to brag about it until now. It is instilled in our very existence.

H.R. 84 could have a substantial impact beyond that of veal producers. Under section 6 of H.R. 84, the broad definition of a calf refers to any bovine animal under 9 months. This broad definition could be construed to also include beef cattle calves, which would disrupt the normal and very humane production practices of beef cattle. Section 3 of the bill could impose dietary requirements which would be totally inappropriate for beef calves.

The cattle industry has never been one to ask for or receive Government support for their business, nor have they been an industry that needed Government regulation to carry out their business in the highest moral and ethical manner. I suppose the old adage "why fix something if it isn't broke" is still appropriate here.

The veal industry has been misrepresented by those adept at manipulating the press and the public. H.R. 84 reflects the viewpoints of a few and, as an organization, we strongly oppose a regulatory bill based on emotionalism, perception, and manipulation, rather than that of sound science and fact.

It is hard not to develop a bond of respect, appreciation and affection for the animals you are a caretaker to—every hour of every day and night. I know very few cattlewomen who have not spent the night nursing a newborn calf, fighting for his life, or worrying that her husband might not find his way back during blizzard conditions as he attempts to provide food and shelter for his treasured cattle.

The American National Cattlewomen formed a taskforce in early 1988 to develop ways to tell the story of the humane and loving care we give our animals. It has always been a goal of the cattlewomen to tell the story of cattle production through classroom educational materials, ranch tours, and one-on-one contact. We have a good story to tell and one that we are proud of. Unfortunately, there just aren't enough of us to tell the story and the media isn't that interested in a little good news.

The American National Cattlewomen have a creed, and I would like to conclude my testimony by sharing the last few lines with you:

> We dedicate ourselves to do all in our power to instill in the coming generation the love of the land and of life, the humility and awe before nature, and the hope and the faith in the future that is inherent in cattlemen.

Our cattle are our livelihood. We respect them, we nurture them, and yes, we are thankful that they can provide mankind with the necessary nutrients for good health and the many by-products that enrich our lives.

Thank you for the opportunity to testify today.

[The prepared statement of Mrs. Lindgren appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mrs. Lindgren.

Mrs. Zeosky.

STATEMENT OF KAY ZEOSKY, NATIONAL DAIRY CHAIRPERSON, WOMEN INVOLVED IN FARM ECONOMICS

Mrs. **Zeosky**. I felt a little bad that someone thought dairy farmers were not really welcome here today. The way the bill is written, it does apply to dairy farmers. That's why I'm here.

My name is Kay Zeosky. I live at Route 1, Box 5, Turin, New York. I'm a dairy farmer and national dairy chairperson for Women Involved in Farm Economics, better known as WIFE. Since calves raised for dairy are included in this legislation, I would like to add my comments for the record.

First, I would like to state that we all share the same concerns for our animals. No reasonable person can stand to see an animal mistreated. We already have State laws to deal with those situations. Well-treated animals grow better. A dairy heifer that is not treated with kindness will grow up to be a cow that kicks every time you try to milk her.

Our calves are raised in individual stanchions, closed on two sides, because they have a very strong sucking instinct. If there is any way for them to reach, they will suck the next calf's udder. The resulting infection will prevent that calf from ever becoming a milking cow. She will freshen with a "blind" quarter, one that contains no milk. With only three-quarters, the milking machine will not stay on her. They also suck each other's mouths and navels, spreading communicable diseases and navel infections. It's sort of like a kindergartner with a cold running around kissing everyone in the class on the mouth.

Our stanchions are graduated in length, and as the calf grows, she is moved down a few stanchions to one that is exactly the right length so her manure can fall in the gutter behind her rather than into the bedding underneath her. In this manner, the calf is always clean and her bedding is dry. If the stanchion is too long, the dirt under her will promote diseases.

Our calves are tied at the front as long as possible, without allowing them to turn around in their stalls. That keeps the manure at one end and a supply of clean feed and hay at the other. Calves don't have an understanding of what will happen to their feed if they should happen to get turned around. Not only would they ruin their own feed, but it would make the feed in the manger dirty for many other animals.

The other reason we use individual stalls is to monitor what each calf eats. When we raised calves in pens, one could be ill for quite a few days before we realized she was off feed and needed medical treatment. If, in a pinch, we have to tie calves near each other until there is room in an individual stanchion, those calves will not do as well. The boss calves take all the hay and feed. Even after that calf has eaten all she can, she may not allow the other one to eat. It is similar to putting your 2-year-old's dinner on the same plate with your 16-year-old's, without being able to explain to him that it was meant for both of them.

I don't think we should be concerned about calves being put on solid food immediately. Thirty years ago, when I raised my children, all babies were eating cereal at 2 weeks of age. You just had to do that. Now the trend has swung back to where it's all right to nurse your baby for many months without worrying about solid food. I think if the proper nutrition is there, the amount of water added to make it either solid or liquid is immaterial. Growers tell me that their veal calves must look good and healthy or those buyers won't be back.

Calves that are not properly cared for and fed will not breed at the proper time to enter the dairy herd. Keeping the calf even 1 extra month ends up costing the farmer a lot of extra money. It would be a very stupid dairy farmer that didn't give his replacement calves the best care he could possibly give.

We feed whole milk to calves, and I think we have lost 5 in 34 years. So it's not the stanchion is what I'm trying to say. It's not the fact that they can't associate or run together and frolic or whatever.

When my husband read about the length of the calf stanchions, he said "My gosh, is there a law about the length of baby cribs? I've seen some bassinets that didn't have 6 inches to spare." I would even venture a guess that every single person in this room does not have 6 inches to spare in his bed. Perhaps we should do some legislation about baby cribs first. They're pretty important.

When I first came to a dairy farm many years ago, I told my mother-in-law, "Boy, I sure would hate to be a cow." My mother-in-law said, "Why? Her surroundings are always kept at a perfect temperature, she just lays there while we run and bring her food, currycomb her, give her a haircut when she needs it, wait on her hand and foot. She has no work to do but eat as much as she can of the best food we can find for her." After 34 years of waiting on them, I have to agree with her.

Thank you for listening.

Now, that's not very scientific testimony, but it's how I feel. There was a veal grower back here that said if he treated his calves the way he got fed today, he would have been out of business a long time ago.

Thank you.

[The prepared statement of Mrs. Zeosky appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mrs. Zeosky. Mrs. Cooper.

STATEMENT OF WANDA COOPER, VEAL PRODUCER, ROTHBURY, MI

Mrs. **Cooper**. My name is Wanda Cooper. My husband and I have facilities housing 960 veal calves in western Michigan. We began veal production in 1976 on our centennial farm. Veal production is the sole income for our family, which includes two daughters.

In the State of Michigan there are approximately 70 special-fed veal farmers. I know perhaps 60 of them. Not one of them is owned by a corporation. We are family farmers.

In the early 1980's, concerns regarding techniques of raising special-fed veal calves became more apparent to my husband and myself. The health and welfare of our calves is of primary importance to us, so we thought well, if there's a better way to raise these calves, then we should probably do it. We decided to convert one calf room to loose housing in March 1984, and in June of the same year we completed construction of our fourth room, designed specifically for loose housing.

I might add here that the specifications for this loose housing came from what we thought was accurate information, from a company that had its main office in England.

The room had large windows and windows in all the doors. We had raised slatted floors in pens, accommodating 25 calves each. Along one side we put in partitions which were placed to protect the calves and allowed the calves uninterrupted rest. In other words, they couldn't be run over if they felt like getting in one of those stalls. They were free to leave this area at will. Mechanical computerized nipple machines with six suckling nipples for each pen was provided.

Our 16 months of struggle with these two rooms remains vivid in our memory. I could talk for hours on these experiences, but I will try just to highlight some of the experiences that we did have. Disease problems were nothing short of horrifying. The sucking of common nipples was an ideal source for the spread of disease and pathogens. We had no control over the amount of milk calves could drink at will. Weak calves were pushed aside.

One of the standard procedures we have in our veal barn is, if a calf scours, we do not feed him milk. We may give him one or two meals of a vitamin and electrolyte solution rather than the milk, and later work him back on to the milk. This is not possible when the calves have a free choice from the suckling machine. So very often, unless we were standing right there, we couldn't pick out which calves were scouring and which calves were not. Many calves got very weak before treatment was instituted.

Navel sucking, ear sucking, and urine drinking were very common. Navel and ear infections were much more common than we have in the stall system.

Early detection, contrary to previous testimony, I feel was much more difficult when it came to spotting disease, and therefore treatments were very often delayed. Identification of calves became necessary to keep treatment records, so this required ear-tagging of each calf, which is a procedure we do not normally have to do.

Normal health maintenance practices were difficult. For instance, in our delousing procedures, if we went in there with a spray system of delousing the calves, the whole pen would get upset. They would run, push, slip, and slide. If we used delousing powder, the calves were free to lick the powder off one another.

We had slotted floors with no bedding. The calves would slip when they walked the lengthwise lay of the floorboards. Around the feeding machines the floors were especially slick from milk drizzled from the nipples. There we placed horizontal tracks for better footing, and we sprinkled sawdust for traction, but weak calves did not walk well in the pens and often could not stand properly before the nipples to suckle.

In one of the previous testimonies there was mention made that in our stall system the calves cannot stretch out, lay on their sides and stretch out with all their feet. This is true. But in our environmentally controlled barns, this is not necessary. In many of the barns we have installed cool-cell pads which bring the temperature of the room down to probably 10 to 15 degrees below what it is outside. They don't have the same need as a calf laying out in the sun, to stretch out on their side with all four legs out in front. I saw that happen once in this loose housing system, in which they were free to lay in any position they wanted, and that's when the calf was bloated.

Quality control over our feed composition was very compromised. Feed would often bridge in the machines and the powder-to-water ratio would be incorrect. As the calves got older, they often chewed off ends of the nipples, making them unusable. Much milk was wasted as it drained on the floor.

Our labor costs were higher. We had to have more time to spend in monitoring and treating calves and checking equipment. Handling calves for diagnostic or treatment purposes was very difficult and required two people. We placed ourselves and our employees on 8 hour shifts to cover a 24-hour period, so that we could give the calves more constant vigilance. I might note during this time that after working with this system for about 5 or 6 months, we all had a morale problem ourselves. It seemed that, no matter what we did, the system failed.

Our calves were not uniform in weight, carcass conformation, or color. We separated calves into pens by their activity, aggressive versus weak or not very aggressive calves. Although the aggressive calves consumed more feed, too many of the group did not make minimum weight, even though we marketed those calves at a later date.

Our resources were very limited for assistance with loose housing problems. Our loose housing representative stayed with us at the farm for 3 days, at our request. When he left, our problems remained and there was no other place we could turn to for help.

We learned a lesson that was costly, not only in dollars but in the welfare of our calves and ourselves. What sounds ideal may not always work in practice.

I have included for the record those five groups of calves that we raised in the loose housing system. I will not go through those figures, except to give you the range of our loose housing calves compared to the range of figures of our present stall system.

In loose housing, our mortality rates were 8.3 to 17.4 percent. Currently, with the stall systems, our mortality is 2.8 percent to 4.9 percent.

Our cull rate for loose housing was .7 percent to 13.2 percent. With our stall system, a half-a-percent to 2.2 percent.

Average daily gain in loose housing was 1½ pounds to 2¼ pounds per day. With our stall system, 2⅓ to 2½ pounds per day.

Our feed conversion rate in loose housing was 1.95 to 2.53. Our conversion rate in the stall system was 1.78 to 1.8 pounds of feed needed per pound of gain.

Additionally, I would like to tell you that we are now spending 40 percent of what we spent during this period that we were messing around with this loose housing system.

Our total losses in calves and operating expenses equaled $81,858. Equipment losses and pen remodeling, when it became obvious we could not use this system, drove our losses up to over $100,000.

In conclusion, we will never again try to raise calves in an alternative housing situation without sound scientific research and evidence that would support such a move. Trial and error on my farm is ended. If a better proven system than the individual stall were recommended and successfully field-tested by the scientific community, we would not be opposed to trying it on a small scale, keeping an open mind to future veal production. We want what is best for our calves, we want to continue in our farming, we want to be able to meet our financial obligations and send our two children to college. Loose housing, as we experienced it, would destroy all those goals.

Thank you.

[The prepared statement of Mrs. Cooper appears at the conclusion of the hearing.]

Mr. STENHOLM. Thank you, Mrs. Cooper. Mrs. Compston.

STATEMENT OF JACQUIE COMPSTON, LIVESTOCK CHAIRMAN, AMERICAN AGRI-WOMEN

Mrs. COMPSTON. Thank you for allowing me to testify here today. This hearing is very important to us, as livestock producers. A better scope of understanding and flow of communication between the livestock producers and animal welfare groups is essential.

My name is Jacquie Compston and I am from Wellington, Nevada, on the California-Nevada border. I am submitting this testimony on behalf of my cattle-producing family, American Agri-Women, and the American Hereford Auxiliary. Our family owns and operates an 8,000-head feedlot, a commercial cowherd, and a purebred Hereford herd.

We are gravely concerned about the ramifications of H.R. 84, cited as the "Veal Calf Protection Act." This bill declares that it is the public policy of the United States to avoid cruelty to animals. We, as professional livestock producers, abide by this philosophy to the utmost, as we care for each and every animal daily, under financial pressure, severe weather conditions, predators, and the media. The daily weight gain and hemoglobin count of the veal calves from former testimony of people today is proof that these animals are not under stress.

The consuming public dictates to us what is desired. We, in turn, try to produce a product suitable to their needs. Lean beef is just one example of our efforts. We are just as health conscious as the general public. We need positive affirmation to proceed in our endeavors in order to successfully do what is best for everyone.

This bill encompasses a topic far too complicated to provide a simple solution. The bill will affect any farmer or rancher who sells even a single calf for slaughter. Veal is defined in this bill as the meat and organs from a calf 9 months old or younger. It does not differentiate between vealers and beef calves.

We wean registered calves for breeding stock and commercial calves for market at 6 to 8 months of age and transport them to a variety of places, such as auction yards, feedlots, or pastures. We try to provide a healthy and clean environment for these animals. Under the guidance of doctors of veterinary medicine and the assemblance of scientific data through our herd associations and educational institutions, we feel that we are capable of handling our inquiries without more Government intervention.

By choice, some producers have chosen to produce veal by the range method. This, per se, is documented, meaning not in stalls. Scientific facts may determine how the animals are raised. Climate, breed of the animal, environment, location, all of these have an impact on his decisions. Cultural preferences may also influence the producer.

With the rising costs in our industry, we cannot afford to have more restricting expenses. The possibility of 1 million or more calves competing for our fat cattle markets could be extremely damaging to the entire beef industry and our way of life. We can change and improve our production methods internally. We have confidence in our national cattle associations and their representatives. My recommendation is to defeat this bill.

Thank you.

[The prepared statement of Mrs. Compston appears at the conclusion of the hearing.]

Mr. Stenholm. Thank you, Mrs. Compston. Mr. Wright.

STATEMENT OF R. GARY WRIGHT, VEAL PRODUCER, CANTON, PA

Mr. Wright. Chairman Stenholm, members of the committee, I thank you very much for this opportunity.

I would like to introduce myself to you in a little more complete way. My name is Gary Wright, 45 years of age, and with my family, wife and four children, reside in Bradford County in the State of Pennsylvania. I am very proud to state that we are veal farmers and that on our family farm we have been caring for calves for approximately 10 years. We are producing a number of calves, in excess of 3,000 calves annually.

I am very concerned about and opposed to H.R. 84. This legislation is based upon a perception of veal farming as depicted by "Misery on the Menu" and other such instances, such as the Slocum incident that I'm personally aware of in Bradford County.

We have heard here today about industry policing. I would like to speak concerning the Slocum incident in Bradford County. I received a telephone call from the Pennsylvania State Police at approximately 3 p.m. on December 24, 1988. The officer stated the situation, that situation being one of abandonment, and that efforts had been made since early that morning by both the State police and the Bradford County Humane Society to find someone to remove and care for these animals. Without hesitation, I agreed to do so. I arrived at the Slocum property at approximately 4 p.m., where I met Diane Forrest of the Bradford County Humane Society, and Officer David Motko of the Pennsylvania State Police.

What I saw was the result of an irresponsible, uncaring person who should never be called a veal grower. I saw calves dead, calves starving, two uncared for dogs, two uncared for hogs, and unclean conditions everywhere inside as well as outside the barn. I saw calf excrement backing up in the barns, rats, insects, lice on the calves, ventilation improperly being run, and no heat in the barn.

At the same time, I saw a feed room full of feed, hot and cold water available, as well as the equipment necessary to supply feed to the calves. I assure you, ladies and gentlemen, that I am as appalled today as I was Christmas Eve, 1988, at being exposed to or hearing of this type of situation.

I am definitely in favor, as a producer, of veal industry policing. I am pleased to report that legislation was in place in Pennsylvania and that Slocum was convicted of cruelty to animals, received a fine and jail term, and is no longer involved in animal agriculture. As to the conviction, Diane Forrest of the Bradford County Humane Society reported to Jim Lowman of Valley Bureau, "I'm rather pleased with the whole thing."

As an extension of my family farm, I supply many farmers in New York, Pennsylvania, Ohio, and New Jersey with Holstein bull calves. This activity has led to my exposure to many veal farmers over the past 10 years. Never have I experienced a single incident that even hints of a situation such as I have been exposed to at the Slocum property in Bradford County.

Further, I am convinced that the husbandry, animal welfare practices, and the vet-client relationship that we employ on our family farm and the farms that I have personal contact with place us within—and I quote from Representative Bennett himself—"the vast majority of producers raising veal are doing so above the standards that my legislation would set." The question that I have now is, Is it then necessary to mandate Federal legislation based on an extremely small minority of poor producers such as the Slocum incident I have discussed?

Even further, can you expect to legislate to another Slocum, if he exists, proper animal welfare practices any better than we can legislate away child abuse or immorality? The vast majority of veal farmers employ sound farming practices and know that what is good for their animals will be good for them. A person who mistreats his animals, as we have heard many times from the panels giving testimony today, is throwing his livelihood away. That type of person is not what I encounter when I visit veal farms.

The proposed legislation, H.R. 84, would, if enacted, place such an unnecessary financial burden on veal farmers that, in speaking for myself, would legislate my family off the family farm that we love so much.

I encourage research in the area of animal welfare and husbandry practices which will benefit my animals. H.R. 84 clearly is not in the best interest of the animal or the farmer. This legislation will affect not only veal but dairy and beef, and generally the raising of all calves under the age of 9 months, and anyone who markets a calf during the same period in violation of the act.

I firmly believe that Federal legislation to take care of the single bad apple is overkill, and as one other testifier stated, a waste of Government resources. Proposed legislation based upon a television show that was designated to capture emotions and hype a growing urban society cannot, in and of itself, tell me how to better care for my animals. The perception of cruelty and the accusations of inhumane treatment are usually leveled by individuals and groups with no farm animal husbandry expertise nor first-hand experience with the species they claim to wish to protect. The usual tactic is to show emotional photos and videos that, to the uninitiated, appear to show an inhumane practice.

Mr. Chairman and members of the committee, I thank you very much for the opportunity to offer testimony today.

[The prepared statement of Mr. Wright appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mr. Wright.

Mrs. Spader.

STATEMENT OF SHERI SPADER, ANIMAL WELFARE CHAIRPERSON, MISSOURI CATTLEWOMEN

Mrs. **Spader**. My name is Sheri Spader. I am a cattle producer from Rosendale, Missouri, active in local, State, and national cattle associations and American Agri-Women. Thank you for the opportunity to testify today.

I am especially pleased to talk to you today about the beef industry, for several reasons. First, our State of Missouri is the second largest beef producing State in the Nation, outnumbered only by Texas. Second, the beef industry is one of the largest segments of agriculture. Of course, agriculture is the largest industry in our State of Missouri and our Nation.

I believe the beef industry produces a product that fits the health needs and lifestyles of all Americans, young and old. The role of beef production in agriculture is basic to the economic well-being of the Nation's agricultural community and the nutrition of our society. Animal agriculture is also the only means to harvest and utilize over 45 percent of U.S. land, marginal land in the United States that is unfit for cultivation and production of cereal grain products. This is documented by our efforts in the past 20 years or more to minimize tillage practices, to conserve acres, and to save the fragile environment in most parts of the United States.

It is with these thoughts in mind that colleges and universities established animal husbandry departments in the late 1800's and early 1900's to help develop and educate farmers and ranchers in the area of animal production. It was this same time that animal protein was identified as an important part of human diet and needs. The term "animal husbandry" is a far-reaching term, but it reflects the dedication and commitment that livestock producers have to the very animals that establish their livelihood.

Today we seem to be approached by those who feel animal production is not in the best interests of the livestock, but for those of us involved, we know that no prudent livestock producer knowingly does harm or damage to the very product that makes a livelihood for them and their family. In fact, livestock producers are and were the first animal welfarists in this Nation.

Animal care, whether named by welfarist or husbandry, is our business. We are caretakers of these animals that serve a useful role in our society, directly affected by the quality of care given. We believe in the creationist philosophy with ourselves as responsible, nurturing stewards, fulfilling this role as best we can.

In contrast, the philosophy of animal rights demands equal value for animals. The animal rights groups, by their very name, seek to produce legal rights for animals. This philosophy is not a new one, as it has tenets in Far Eastern religions.

However, in our democratic society, founded upon a wide freedom of philosophy and religion, no such doctrine should be forced on another by way of legislation imposing its tenets of philosophy on a livelihood.

As a cow-calf producer who has spent my entire life in the production of beef cattle, I am affiliated with groups of other such producers. We spend volunteer time and money educating ourselves in the best management and practices of this role we care so much about.

In representing two such groups, the Missouri Cattlewomen and Cattlemen, I carry resolutions passed in 1989 concerning this issue. On May 25, 1989, the Missouri Cattlemen passed unanimously a resolution opposing H.R. 84 and its intent, and are opposed to any such legislation restricting beef production in a like manner.

This legislation sets a precedent we do not want or need, imposing philosophical doctrine of others on our methods of animal care in our livelihood.

I would like to comment that, in addition to my testimony, copies of a policy statement and resolutions that were passed by the Missouri Cattlemen's Association are included.

Thank you for allowing me to testify today.

[The prepared statement of Mrs. Spader appears at the conclusion of the hearing.]

Mr. **Stenholm**. Thank you, Mrs. Spader.

Mrs. Huffman, in your testimony you stated that calves have enough room to make normal postural adjustments. Dr. Fox earlier today stated they do not have enough room.

Has your organization ever considered funding studies to determine the facts regarding those two assertions?

Mrs. **Huffman**. Well, the American Veal Association simply does not have the funds. We're a small association and we don't have the funds available.

However, with the checkoff that had gone through several years ago, funding may be available to do research in specific areas, not to include production practices. So at this point, we do not have the funding available.

Mr. **Stenholm**. If funding should ever become available from any source, I would suggest you might pursue with Dr. Fox a joint research project and let he and his group fund half of it to make the determination. That might be something to consider.

Mrs. **Huffman**. I would think that if groups might spend more money on research and less on magazine advertising, perhaps we could get some reliable, scientific data which has been reviewed by a peer group before being published. This would be very acceptable if it's done in the right manner.

Mr. **Stenholm**. We've had some conflicting testimony today concerning who would be the most affected by H.R. 84. One witness today stated that very few stall-raised veal producers have been farmers all of their lives. Would any of you care to comment on those two remarks?

Mrs. **Huffman**. Like any other occupation, farmers can get into it such as I did. I had been a schoolteacher and have been a veal producer for 11 years. My husband was born and raised on cattle ranches in Oregon. Many veal producers have grown up with their parents owning veal farms. The veal industry in the United States is only about 30 years old, so it is rather difficult to have been born into it unless you are a younger person. Many people were formerly dairy producers and have gone into this type of business.

As far as who would be affected most by it, everyone would be affected by it simply because they could not operate a barn any longer by reducing their capacity, as the bill states, by two-thirds. You could not afford to heat the barn, to maintain that size of facility, with such a low number of animals marketed.

Mr. **Stenholm**. Do any of you have experiences as Mrs. Cooper outlined in her testimony, concerning the difference between the stall versus the open pen and some of the economic data that she furnished? Does anyone else have any observations?

Mrs. **Huffman**. Yes, I have seen a number of veal barns in Wisconsin and other States that have tried the loose housing method. I have also, in the past month or so, tried to get any available data, and I have compiled a listing from several companies, of grower after grower, numbering in the hundreds, and testimony, names, addresses, and phone numbers and comments, such as converting individual crate facility to loose housing causing bankruptcy—this is just typical of the situation.

On our farm, for example, we used to raise hogs in confinement. However, we didn't produce any feed for the hogs. We had to buy everything. We simply could not make a go of this financially. So we had converted this hog facility, which is a modern pole building, a metal building. We had converted this over for loose housing facilities about 4 years ago. We have spent about $15,000 in preparing this building to hold calves. However, because of the results that Wanda and almost every other veal grower that I've heard of have experienced with loose housing, our barn is sitting there unused because we're afraid to try this.

Mr. **Stenholm**. One of our witnesses today made the comment that very few stall-raised veal producers have been farmers all their lives. Would you comment on that?

Mr. **Wright**. Chairman Stenholm, I would like to address that briefly.

I was born and raised on a dairy farm in Canton, PA, Bradford County. I was involved in a farm accident involving a tractor and sustained some severe back injuries. I decided that I perhaps would not be as mobile as necessary to take care of a dairy farm atmosphere and elected to go away to college and spent a few years teaching secondary education. I got involved in sales management for a 10-year stint and found that the agricultural roots and the way of life that I was born and raised into became extremely attractive to me.

I left perhaps one of the best-paying vocations of my life to return to the agricultural community with my wife and family. I would hate to think that what I and my family have become so comfortable with, so satisfied and gratified with, could be jeopardized by such a proposal as H.R. 84.

Mr. **Stenholm**. One last time for the record, what happened to bull calves before the veal industry came along?

Mrs. **Cooper**. I remember, Chairman Stenholm, when my father was a dairy farmer—that would be back in the forties and fifties—he would put the bull calf to sleep because it was not worth his time to spend his entire day taking one or two bull calves down to the sale in Ravenna to get $5 for it. It was not worth his time. It was a useless product to him.

Mr. **Stenholm**. What is the current market for bull calves?

Mrs. **Cooper**. In 1976, when my husband and I first started producing veal, we paid $49 per calf. We are filling this week in excess of $185 per calf.

Mrs. **Zeosky**. That's not true in New York State. In New York State we probably are real lucky to get $100. Once in a great while you will get something more, but it's not that high. But they are bob veal and not usually going to a veal barn.

Mr. **Stenholm**. Do you have a truck, Mrs. Cooper?

Mrs. **Cooper**. No. [Laughter.]

We have order buyers. These calves come from many different sale barns. In order to be able to fill our facility in 1 week, we have to use order buyers.

Mr. **Stenholm**. Mrs. Zeosky.

Mrs. **Zeosky**. I would just like to make a comment. I'm sitting here all day, and this bill is so vague that it scares me. I hope nobody is going to vote on it until they get something definite in the bill. I mean, there's nothing there. It's so very vague that it's frightening. They don't have the size down here or anything really definite.

Mr. **Stenholm**. Mrs. Huffman.

Mrs. **Huffman**. Representative Stenholm, it has been a long day for everyone and I would appreciate your indulgence for a few more minutes. We're talking about our survival as veal farmers. I feel it is important that we make a few more statements on this.

Why am I against this bill? Because of emotional arguments not based on sound science or vet/producer practical experience, in addition to not stating the difference between male and female calves, between beef, dairy, and veal breeds. It is also based on an assumption that the feed is inadequate and that the iron is too low.

As we have heard time and again today, the iron level has to be adequate or the animals won't eat. They won't gain weight and they won't grow.

We carefully monitor iron levels. On our farm, for example, when calves come in, they are routinely given injectable iron as well as selenium, and they are fed supplemental oral iron for the first 6 weeks, at which time the calves are tested randomly. Every 10th calf in the barn is given a blood test. At 10 weeks of age, they are once again tested, and at 14 weeks of age they are tested again. We follow a level of hemoglobin that we want to keep the calves at. We don't want them to become anemic.

The size of the stall, as I said, is based on a guide for the use of laboratory animals, specifically dogs. There is no research saying that by increasing a stall size three times will be of any benefit for that animal. It doesn't mention in the bill that the animal would be tethered or not be tethered. If we don't tether him, he is going to be having an extremely messy stall, deficating in his feed bucket, jumping out of the stall. It is just not a sound, practical method for raising an animal.

All farms with bovine animals under the age of 9 months old would be inspected. How are people going to inspect them? We would have to set up some kind of a licensing system to license farmers to know who to inspect. Then we would have to train USDA inspectors to go around to all of these farms all over the United States to inspect. Then we would have to set up some kind of a reporting system, as is set out in the bill. USDA could simply not afford to do such a thing, especially when there is no need to do this. Then USDA would put on an educational program to educate farmers on how to raise their animals.

Violations. We could appeal a violation, but who could afford to appeal to the Secretary of Agriculture, or take it to district Federal court? And if we do take it to the Federal court and lose, or if we don't appeal it, then the bill assumes that the Secretary of Agriculture would refer to the attorney general to send U.S. marshals out to farms to collect up to $3,000 fine per animal.

The responsibility for animal husbandry should lie with farmers, which is where it belongs.

I would also like to mention the fact that the American Veterinary Medical Association was contacted by Representative Bennett's office, requesting their support for this bill. Upon reviewing this bill, after listening to a presentation by Dr. Clyde Smith and myself, and discussing this with the animal welfare committee, the American Veterinary Medical Association decided they could not support this kind of a bill but, in fact, they do state that confinement provides many opportunities to enhance the health and welfare of food animals. They go on to say that farmers, being specialists, are even more in tune to what is required for the welfare of their charges than were their counterparts of the past.

Also, the New York Veterinary Medical Association had requested that I make a presentation to them last week concerning a New York State veal bill. They also said they could not support this. This goes to show that men who are involved in the daily practice of animal production practices cannot abide by such requirements or standards such as are being set down.

I would also like to make it known that I will submit for the record this stack of producers who have gone out of business and why they've gone out of business, using alternative methods of raising milk-fed veal calves.

I would also like to submit for the record a letter from Julia Child, who was quoted in "Misery on the Menu," in which she states that her views were misrepresented in that film. She has found no alternative method for raising veal calves, nor does she find any other meat acceptable for a substitute for veal. What you have is a product referred to as "baby beef" or even less.

Mr. STENHOLM. Without objection, all of those statements will be made a part of the record.

Mrs. HUFFMAN. Thank you.

Mr. STENHOLM. Also, I have a statement to submit from the Honorable Ron Marlenee, if there is no objection.

Also for the record I would like to include a written statement submitted by the Doris Day Animal League, dated June 6, 1989. Also, if there is no objection, I would like to include a written statement submitted by the Holstein Association of America, dated June 6, 1989, and a written statement submitted by the National Grange, dated June 6, 1989.

Finally, a written statement submitted by the National Farmers Organization, dated June 6, 1989.

Let me say in conclusion, I want to again thank all of you for your patience. This is an extremely important matter. It is one of which we have felt that a hearing was needed in order to establish for the record that there are differing viewpoints. In some cases, there is scientific bases and in other cases there are personal opinions. But also, there is the realization for all of us in production agriculture that the consumer is always right. That is something we should never forget.

The quality assurance program that you in the veal calf industry have started on your own volition, I was very glad to hear supportive statements by some who you would not have expected to have stated perhaps, that the best way to do this is voluntarily with control by the producers. Now, that's the charge and the challenge to you, to not only continue what you've started. but to recognize that not only are you a local, State-by-State association, perhaps, but it's also national and international regarding some of the questions being posed. The challenge that this committee is going to be looking at is the need to take the best food production factory the world has ever known and make it better.

If you eat, you're involved in agriculture. Everybody has got to be listened to and everybody has got to be considered.

Somehow, some way, the challenge is to get the true story told. That's what today has been all about. We thank you for being here and for participating in this hearing. We appreciate it.

This hearing is adjourned.

[Whereupon, at 7:15 p.m., the subcommittees were adjourned, subject to the call of the Chair.]

[Material submitted for inclusion in the record follows:]

Statement of the Honorable Charles E. Bennett before the Subcommittee on Livestock, Dairy and Poultry concerning the Veal Calf Protection Act

June 6, 1989

Mr. Chairman: Thank you and the distinguished subcommittee for this opportunity to testify today on my bill, H.R. 84, the Veal Calf Protection Act.

As you may be aware, I originally introduced this legislation after viewing the "Misery on the Menu" series. The inhumane crating of these veal calves for their entire lives, and my concern for the health of the ultimate consumer, the American public, led to my decision to introduce legislation to correct unsatisfactory methods of raising veal calves.

As I begin my testimony, I want to assure the committee that I am personally not anti-veal; in fact, I used to eat veal before I became aware of the terrible conditions existing in the raising of crated veal calves. Nor is this legislation anti-veal; quite the contrary, this legislation is pro-veal and pro-consumer.

My legislation continues to allow widespread farming of veal with needed but modest limitations -- in fact the only requirement mandated by the bill is to increase the size of the crate (which by current industry standards is only 22" wide, or about the width of a full grown calf), so that the crate is at least 6 inches larger, in all directions, than the length of the calf measured from the tip of its nose to the base of its tail. Though the bill does not provide for it, in recognition of the capital invested in the current crates, I would not oppose a 3 year phasing-in period , which I understand is the approximate effective life of the veal crates.

Even some members of the industry agree that raising veal in these tiny crates is inhumane, and casts a black eye on the veal industry. I would like to read exerpts from an article authored by Dan Murphy, editor of Meat Processing magazine, that appeared in the February '89 issue. Addressing the issue of veal calf confinement, the editor of Meat Processing magazine states, and I quote:

"Over the years, veal growers have tap danced around the problem, trying to blame the purveyors, who blame the chefs, who blame the consumers. Fact is, it won't be the end of the world if the public can't dine on so-called 'white' veal, produced in part by restricting the movement of calves in veal crates. Nor will the market for veal be shattered. Its culinary appeal and nutritional superiority will continue to appeal to legions of customers - no matter what the color of the product. ... [P]ink veal tastes exactly the same [as white veal]. There is no difference. Thus confinement has no validity on the production side. ... How do you come out in favor of confinement without sounding like a villain? The answer is you don't. Instead of fighting over whether it's bad, or how bad it really is, the entire industry -- from grower to end user -- should unite in a public repudiation of the entire concept of confinement," says Dan Murphy, editor of *Meat Processing* magazine.

Contrast that with R. G. Warner with the Department of Animal Science at Cornell University who writes, "the meat must be white, ... and is found only in a highly anemic calf. While substantial fat on a carcass, low in iron, **can be condemned from a human nutritional standpoint**, the packer still buys the carcass."

As Dr. Warner points out, confinement is not the only problem with crated veal farms. Most veal raised in small crates are fed diets low in iron, causing anemia, and to offset the effects of anemia, and the stress of confinement, the calves are kept on a regiment of antibiotics, drugs which remain in the calves system and ultimately end up digested by human consumers. Veal raised on a diet of milk replacer, without a sufficient supply of palatable and digestible solid food and iron, also do not develop their rumen, (which is the first stomach of a calf), thus compounding the drug residue problem. FDA studies show that non-ruminating calves will retain illegal drugs for a much longer period than ruminating calves.

My bill addresses this problem by requiring the Secretary of Agriculture to establish standards for calf feed which will allow for natural rumen development. While some drug use may be necessary for sick calves, much like sick children, drug use should be on an individual basis. We should not allow widespread, indiscriminate use of drugs on calves any more than we would allow in discriminate use of drugs on our children.

A recent American Veal Association newsletter claims that "if [H.R. 84] passes, [veal farmers] will be forced out of business." That is simply not true. What it would do though, is to establish standards for the raising of calves to allow the calves to live a less painful and enfeebled life. It would also ensure that veal consumers are not unknowingly exposing themselves to unacceptable levels of residual drugs. H.R. 84 will not destroy the veal industry, veal can be produced humanely and economically and in a way that protects the health of the consumer.

My legislation enjoys widespread public support. I have brought petitions signed by approximately 60,000 people expressing their support, my office has been overwelmed with letters supporting this legislation from districts all across America.

I encourage this committee to enact this modest legislation. By doing so you may very well be saving the industry from itself. Properly raised veal is an enjoyable, healthful food, crated veal is a sore thumb to all of agribusiness and has led to consumer boycotts of veal, both because of the small crates and because of concern over drug residues; restauranteers and supermarkets are following suit. If we stop this practice now we can save the industry. H.R. 84 is needed by the public and by the industry itself.

Thank you for allowing me to testify.

STATEMENT OF
DR. R. D. PLOWMAN
ADMINISTRATOR, AGRICULTURAL RESEARCH SERVICE
U. S. DEPARTMENT OF AGRICULTURE

Mr. Chairman, this is the first time since I assumed the duties of Administrator of the Agricultural Research Service (ARS) that I have had the opportunity to appear before your Subcommittees. I am well aware of the Subcommittees' support of our research programs and the interest you take in our activities. I am accompanied today by Dr. Lewis W. Smith, National Program Leader for Animal Nutrition on ARS' National Program Staff, and Dr. Joan Arnoldi, Deputy Administrator, Regulatory Enforcement and Animal Care, Animal and Plant Health Inspection Service.

The Department opposes the enactment of the legislation before us today, the Veal Calf Protection Act, and I will discuss that in more detail in a few minutes. First, I would like to discuss briefly veal production in the United States. Veal calves are generally the male offspring of a dairy cow. Since they are of little importance to a dairy operation, these bull calves are sold at auction to veal producers. It is the special-fed (formula-fed) veal calves that are the center of a controversy with respect to humane treatment. Of the approximately 2.8 million veal calves slaughtered in 1987, only about 1.0 million were special-fed. Considering that in that same year approximately 35.9 million cattle were slaughtered, this would represent only 1 percent of the total U.S. meat production from cattle and one-third of the veal production. Because of market demands for this type of meat, the price producers receive per pound of liveweight is somewhat higher.

In some special-fed veal calf production systems, dietary iron intake and opportunity for movement are controlled so as to reduce muscle myoglobin and produce the commercially desirable light pink carcass.

There is a general perception that calves are purposely made iron deficient or anemic to produce the desired coloration of the meat. This is not true. An anemic condition is reflected in low blood hemoglobin levels. Studies show that veal hemoglobin levels are adequate. It is muscle myoglobin, not blood hemoglobin, that affects the color of the meat. One of the most widely noted studies regarding the effect of dietary iron on hemoglobin and myoglobin levels in veal calves was conducted by British researchers in 1976 which indicated that a concentration of iron in milk substitute diets of 25-30 milligrams per kilogram of dietary dry matter provides enough iron to produce sufficient hemoglobin for normal appetite, growth, and oxygen transport for up to moderate stress to the cardio-respiratory system.

Research has also shown that raising veal calves in elevated individual stalls reduces disease incidence and increases survival rate. Infectious disease, primarily acute diarrhea, is the major cause of death in calves under 2 months of age. Relative isolation of calves in individual stalls with slotted floors is beneficial in minimizing calf-to-calf contact and cross infection leading to diarrheal disease. Individual housing and feeding provides for daily observation of each animal which permits early detection of sick calves and individual care.

We believe that the bill's language which directs the Secretary of Agriculture to issue rules on raising calves for veal is an unnecessary expansion of Federal regulatory authority. While we certainly support the humane treatment of farm animals, the role of the Federal Government is and should be the generation and transfer of needed technology to enhance, not regulate, farm management which includes improvement of productivity and competitiveness. The Animal Welfare Act, administered by the Animal and Plant Health Inspection Service of the Department, provides for the establishment of standards for the humane treatment of animals that are sold as pets at the wholesale level or are used for research or exhibition, and requires that people dealing with these regulated animals be licensed. Production animals used for food and fiber were specifically exempted from the Animal Welfare Act.

Nevertheless, there are research programs both completed and currently being conducted to achieve the objectives of the bill. Agricultural Research Service scientists are continually conducting research on ways to identify and quantify stress in farm animals. Research findings help us to recommend changes in facilities and management practices to enhance the well-being of farm animals. The USDA Extension Service, using the findings, provides educational programs for veal producers and marketers on best management practices, taking into account geographic and environmental variations. These practices are designed to optimize animal health, food safety and humane treatment. In addition, guidelines for veal calf production have been developed and are available from the American Veterinary Medical Association and the American Veal Association. We believe these activities already are achieving many of the objectives of the bill. Therefore, we do not recommend any legislative action and oppose the enactment of H.R. 84.

Mr. Chairman, while USDA has no authority to regulate husbandry practices for these animals, we are continually striving to provide good research findings and educational materials to our Nation's farmers in order that they can make informed decisions regarding management practices best suited to their industry.

Mr. Chairman, this completes my prepared statement. I and my associates will be pleased to respond to any questions you may have.

STATEMENT OF

STANLEY E. CURTIS
PROFESSOR OF ANIMAL SCIENCES
UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS 61801

BEFORE THE
HOUSE AGRICULTURE SUBCOMMITTEE ON LIVESTOCK, DAIRY, AND POULTRY
AND THE
HOUSE AGRICULTURE SUBCOMMITTEE ON DEPARTMENT OPERATIONS,
RESEARCH, AND FOREIGN AGRICULTURE

RELATIVE TO
H. R. 84,
A BILL TO PROHIBIT CERTAIN PRACTICES
IN THE RAISING OF CALVES FOR VEAL,
AND FOR OTHER PURPOSES

6 JUNE 1989
WASHINGTON, DC

Mr. Chairman Stenholm, Mr. Chairman Brown, Honorable Members of the Subcommittees, and Staffs.

Thank you for the invitation to comment on H. R. 84, a bill to prohibit certain practices in the raising of calves for veal, and for other purposes. This hearing on the bill is important, its being the first Congressional hearing on any bill relative to animal husbandry practices in agriculture. As an animal scientist specializing in environmental physiology and behavior, I recommend that H. R. 84 not be passed into law, and my general and specific reasons for this position follow.

The setting

Animal producers care about the well-being of their animals, and any representation to the contrary comprises a calumny. Furthermore, animal producers listen carefully to their fellow citizens. For a long time, Americans have asked agriculture to produce plenty of cheap, safe, wholesome food. Producers have done that, and will continue to act responsively and responsibly in this respect. But when it comes to specifying and prohibiting methods and practices of food-animal husbandry, the well-being of animals is at stake, and so the members of the public have an obligation to know what they are talking about.

Moreover, each and every element of animal care is costly, so in the interest of keeping our food supply priced reasonably, only changes that will actually yield the intended animal welfare results--as determined by informed political consensus--should be mandated.

In order to achieve the goals of animal agriculture, operating in contemporary regulatory and economic climates, compromises have had to be struck. Agriculture has drawn the lines in these matters with little direct input from the public. In the future, presumably, the public will participate more in matters of farm animal care. This public participation should be founded on scientific principles and facts.

Human values in terms of ethics and aesthetics will enter in, too. Human values certainly should be considered, but ordinarily they should not be major determinants of the ways and means of producing agricultural animals. Resolution of issues that are as emotive and as personal as the one surrounding the welfare of animals presents difficulties in this pluralistic society of ours. If everyone, based on their respective personal perceptions, opinions, and emotions, had a say as to how agricultural animals are managed, producers would be receiving more noise than signal, and chaos would ensue in the animal industries.

Moreover, food production is too critical to the health of our people and the security of our nation to be put in the hands of those who would politicize the issue of farm animal welfare for the purpose of regulating animal care practices on farms, ranches, and elsewhere to suit their personal prejudices. Again, our course in these important matters must instead be founded on scientific principles and facts. With specific reference to the bill before us, it is my opinion that these bases in scientific principles and facts are lacking.

Indeed, some want to see laws and regulations now that would specify how producers and others would house, feed, transport, and otherwise treat food animals. Most of us who work one way or another in animal agriculture believe that, in many respects germane to the expressed concerns of certain citizens, we are not yet sure what the animals need. We believe, therefore, that we need to learn more specifics about the factors that determine animal needs before we will know how to fulfill these needs.

The last decade has seen in agriculture an awakening and a setting of a general framework for the evolution of production technologies--based on scientific principles and facts--that would ensure that the animals' needs were being accommodated. But at this time, in no way are we able to discriminate precisely enough among the various levels of overall animal well-being engendered by different production practices and systems to be justified in outlawing some of the practices and systems used in the raising of calves for veal, upon which this bill focuses.

I am intrigued by the ways animals react to, adapt to, and cope with different production practices and systems. I am aware of the superfluousness of and therefore the inadvisability of some proposed means of enhancing the well-being of animals. Indeed I am alarmed by the potential for actual harm to the animals that might result from some of the well-intentioned but naive laws and regulations relative to husbandry practices that are being proposed. Sooner or later--in the interests of the animals, to say the least--naivete will have to be supplanted by knowledge, which can come only from scientific research.

Prominent British animal scientist Colin Spedding (1985) has said: "Perhaps the biggest danger is that a dissatisfied public may demand changes that eliminate what is disliked but that result in either no improvement or even a reduction in the welfare of the animals involved."

The welfare plateau

On any farm, continuously achieving the highest possible level of animal welfare all the time is practically infeasible. It has been proposed that an ethically acceptable level of animal well-being is not limited to one ideal production system, but rather that animal well-being is supported by a range of conditions provided by a variety of systems (Duncan, 1978; Curtis, 1985). Of course, a system located even at the lowest point in this range still would meet the minimum standards for acceptability.

Producers want to provide their animals an existence as free of suffering as possible. On the other side of the balance, they must adopt production systems that are optimal for prevailing economic conditions. Thus, producers face the reality of having to deny their animals the greatest possible well-being--that is, having to deny their animals quarters resembling in human context the Taj Mahal--for the sake of the economic viability of their businesses.

This tends to locate the most widely adopted production systems in the lower part of the acceptable range. Consequently, it is predictable that those citizens who are especially sensitive to but not necessarily knowledgeable about the feelings and needs of animals will continue to find fault with animal production systems that the majority of citizens consider to be above the acceptable threshold.

Again, the need for scientific assessment of animal well-being--instead of its being assessed on the bases of the perceptions, opinions, and emotions of every individual, different as we are in these respects--is emphasized.

Scientific assessment of animal well-being

Ian Duncan and Marian Dawkins (1983) have said about the terms "well-being" and "suffering": "it will be very difficult, if not impossible, to give them precise definitions." To be sure, as Broom (1988) has pointed out, "in order that proper decisions about issues concerning animal welfare can be accepted by the general public and by legislators, there is a great need for clarity in the terminology used when considering the subject and precision in the measurement of welfare". Alas, these needs are not being met.

The well-being of an animal is a dynamic state, varied in its manifestations and enormously complex. It is unrealistic to expect that animals will, can, or should experience continuous and unqualified well-being. Still, even though well-being cannot be defined precisely, those of us who accept the responsibilities and obligations of caring for animals, particularly animals that are limited in their opportunities to care for themselves, must use any and all available knowledge, ways, and means to make our charges as comfortable, calm, and healthy as possible.

Today, the consensus of scientists from various specialties in Europe and North America alike is that an integrated group of indicators is the best way to assess an animal's overall well-being (Smidt, 1983). In a theoretical refinement of this approach, Broom (1986) has suggested that "any single indicator can show that welfare is poor", thus "a wide range of welfare indicators should be used", and moreover that "the absence of one particular indicator of poor welfare, for example when growth rate is good, cannot be taken to mean that there is no welfare problem".

The consensus categories of indicators of animal welfare are:

1) productivity indicators,
2) pathologic indicators,
3) physiologic and biochemical indicators, and
4) behavioral indicators.

First, productive performance. There is a strong direct correlation between an animal's well-being and its productive performance, an productive performance arguably is the most reliable single indicator of overall animal well-being we have for use in day-to-day animal management today. Top-performing animals almost always are well. As with any correlation, however, this one is not perfect. For example, an animal may be suffering in some way and still be performing profitably in the agricultural sense. Moreover, there is agreement that productive and reproductive performance cannot be used as the single indicator of overall animal well-being.

Second, pathologic indicators. The very word "disease" indicates that the unhealthy animal is suffering. Maximizing the physical and mental health of the animal is a crucial facet of sound animal husbandry.

Third, physiologic and biochemical indicators. For the most part, these traits are indicative of animal welfare only insofar as they are correlatd with, and reflect some aspect of, well-being. In and of themselves, physiologic and biochemical indicators are not generally useful in the assessment of animal welfare.

Fourth and finally, behavioral indicators. Again, to quote Duncan and Dawkins (1983): "Abnormal behavior may be an indicator of suffering, but how do we define 'abnormal'?" And: ". . . the whole welfare debate hinges on the controversial questions, 'Do animals have subjective feelings, and if they do, can we find indicators that reveal them?'" Agricultural animals probably do have feelings of various sorts. The only way we will learn for sure is to conduct scientific research (necessarily of an indirect nature at present) on these animals' mental experiences. It can even be argued that, regardless of its status in any other respect, unless the animal feels that it is not well, then it is in fact well.

Still, there is discussion among scientists when any attempt is made to actually assess in definitive fashion the well-being of a particular animal in a particular production environment. When Broom (1988) said that "[animal welfare] can be assessed precisely", he presumably was referring to the welfare of animals in a closely controlled and monitored situation. Some day--after much more research--precise assessment of animal welfare may be possible on farms, but it simply is not possible today.

Dutch veterinarian/animal husbandman F. J. Grommers (1980) has suggested that we should evaluate any husbandry procedure or method in terms of its overall acceptability by taking into account all relevant factors. These include: the technique's description, its objectives, consequences for the short- and long-term well-being of the animals, aspects relevant to society, alternative techniques, certain other considerations such as reasonableness, needlessness, and ethical tolerance, and the opinions of the people directly involved. In these regards, there are still many questions but not yet many answers.

Animal needs and animal care

Animal care aims to fulfill animal needs. In order to know how to care for animals, their needs must be known. Some animal needs are understood better than others, hence some needs can be fulfilled whereas one simply cannot know whether those less well understood are being met.

One approach to determining what an animal needs in terms of its residential quarters that can lead to pitfalls involves anthropomorphism. We can and we should use human perceptions and feelings to give us ideas about what might be happening in an animal's conscious mind. But humans and animals, respectively, are special animals. Even within the human species, each of us has his or her own unique array of totems and taboos, and they bias and taint our every subjective mental experience. How could we possibly speak for another person, let alone another species?

Maslow (1970) proposed that human needs stand in a hierarchy according to their relative strengths. Application of this scheme to animals might result in a hierarchic organization of animal needs along the following lines (from lowest to highest): 1) physiologic needs, 2) safety needs, and 3) behavioral needs (Curtis, 1985). In essence, the physiologic needs (for nutritious diets, appropriate health care, and adequate shelter) are well understood, and are being fulfilled reasonably well. The safety needs (for protection from predators, weather accidents, and unsafe equipment) are somewhat less well understood, and are being somewhat less well attended. The behavioral needs are not well understood at all, and thus we cannot know yet whether or not they are being met. The physiologic needs and safety needs have been discussed elsewhere (Curtis, 1985, 1987), but it is germane to this hearing to discuss behavioral needs more fully here.

Human maltreatment of animals falls into one of three categories: abuse, neglect, and deprivation (Ewbank, 1981). Abuse and neglect occur infrequently in animal operations, and must not be tolerated when they do occur. Deprivation is the form of maltreatment most difficult to assess, and many of the animal welfare concerns in agriculture have to do with alleged deprivations.

Many of the factors of which farm animals may be deprived are behavioral in nature, but none has yet been ascertained as a biological need, let alone characterized to the point of being useful in the design and operation of animal quarters. Behavioral needs presumably would be signaled by demonstrations of frustration, fear, or discomfort. Many such behaviors are so subtle or of such short duration that even herders and researchers with many years of experience with the animals do not recognize them.

Barry Hughes (1980) proposed a simple but instructive model of motivation for the assessment of animals' behavioral needs. In his approach, behaviors would be assigned to one of three categories: 1) environmental stimuli of these behaviors are more important than internal motivators; 2) internal and external factors both contribute significantly as triggers of these behaviors; and 3) internal factors are the chief releasers of the behaviors in this category. An example of a category-1 behavior in a calf would be an escape behavior; an example of a category-2 behavior would be the startle response to being suddenly awakened; and an example of a category-3 behavior would be an eliminative behavior.

Hughes suggested that, to ensure animal well-being, it would be essential that the environment permit the animal to perform all of the behavioral patterns in category 3 and, in addition, it would be desirable to provide for some of those in category 2. The decision as to whether a particular category-2 behavior ought to be accommodated by the environment would depend on the relative contributions of external and internal factors to its release; if it is performed sometimes even without significant environmental stimulation it ought to be accommodated by the residential facility we provide the animal.

For a behavior pattern to be considered an essential behavioral need (category 3), Hughes would require clear evidence of either frustration or distortion of the behavioral patten; these are ascertainable only if the animal's behavioral characteristics are understood precisely. To determine behavioral needs, the animal must be subjected to thorough behavioral analysis. Casual observations of animal behavior--or worse yet, second-hand viewings--lead to anecdotes that vary greatly in their credibility and insight. It is dangerous and unacceptable to base the design of animal production systems on anecdotal evidence.

In a most useful recent paper focusing on behavioral (or ethologic or psychologic) needs of animals, Ian Duncan (1987) has made several important points (some emphasizing ideas and principles already articulated here), which I have extracted:

> 1) The manner in which, and the extent to which, we exploit animals involve ethical decisions which should be made by society in general.
>
> 2) Scientists . . . can help society in making these decisions by providing scientific evidence on the facts.
>
> 3) . . . the topic is further complicated by aesthetic judgements. Thus partially de-feathered hens or cattle in feed-lots without access to grass may offend some people's aesthetic sense no matter the welfare implications of such things.
>
> 4) It is generally agreed that in any assessment of welfare, all the available evidence should be taken into account. This will include evidence of the animals' health, production, physiology and biochemistry as well as behaviour. Unfortunately, these classes of evidence all have short-comings. Although disease and injury can be used as indicators of reduced welfare, their absence is not sufficient to prove well-being. The problem with the other indicators is one of calibration; how much of a change indicates reduced welfare? For these reasons, as many sources of corroborating evidence as possible should be sought.
>
> 5) States of suffering such as frustration and fear can be

recognized when the behavioural indicators are known. This approach has been successful with domestic fowl in that the husbandry conditions and procedures likely to lead to frustration and fear are now known, allowing steps to be taken to reduce them.

6) Behaviour can be observed in an enriched environment in order to understand its function and development. This approach has been successful with pigs and has enabled a husbandry system to be designed which almost certainly safeguards welfare.

7) Preference tests backed up by tests in which the strength of choice can be measured give some insight into what animals "feel" about different aspects of their environment. However, there are problems associated with using a simple operant response to do this and some advancement in causation/motivation theory is required before the method will reach its true potential.

8) The question of animal cognitive processes has aroused much interest recently and there is general agreement that animals as phylogenetically advanced as farm livestock have some sort of awareness. The problem is, how much?

9) . . . as pointed out by Dawkins [1983], the concept of animals having "ethological needs" has crept into the applied ethological literature and even into the welfare legislation or some countries, although the term itself has no solid foundation in scientific ethology.

The welfare of an agricultural animal might require fulfillment of all of the animal's physiologic, safety, and behavioral needs most of the time. However, in real life, some stress at all times is the rule, not the exception. Indeed, the absence of stress usually leads to boredom, and not necessarily to comfort. The challenge is to learn where stress ends, and where distress begins. This task is still difficult because many interrelated, poorly understood factors are involved.

The precise limits of experiences that give animals pleasure or displeasure, comfort or discomfort, pain or the absence thereof remain enigmas. The amount of stress an animal perceives apparently depends not only on the intensity and duration of the environmental impingement, but also on the animal's psychologic and physiologic states and previous experiences (Curtis, 1985). Furthermore, animals' wants do not always correspond to their needs. This may be so even for basic needs. Therefore, results of choice tests, conducted as a means of letting animals identify preferences, must be interpreted carefully.

A practical way of fulfilling wants and needs is to give the animal operant control of an important environmental feature such as feed, temperature, or light. It can be presumed that such an approach increases the animals' sense of control in surroundings that fluctuate, sometimes unpredictably and irrationally, in both time and space, and thus this approach presumably enhances the feeling of well-being (Wiepkema, 1982).

Assessment of well-being in agricultural animals cannot at this time include any valid estimate of mental suffering--which is absolutely essential to the assessment of overall well-being of an animal--because we still are unable to do such an evaluation. But such an assessment must take into account all possible physiologic, immunologic, behavioral, anatomic, and productivity indicators of stress and distress. Meanwhile, health, reproductive, and productive traits continue to be the most reliable farm-level indicators of fit between agricultural animals and their environments.

H. R. 84--the bill in particular

In view of my understanding that other scientists have been invited to make in-depth analyses of the specific elements of the bill, I wish to confine my comments focused expressly on the bill to a few general observations.

I want to preface these observations by saying that the fact that some nations in Western Europe have already enacted legislation similar to that proposed here makes little impression on me. The political processes in regard to farm animal welfare issues in the respective nations of northern Western Europe have been going on for quite some time without the benefit of adequate science, in my opinion (Guither and Curtis, 1983). For reasons I have tried to explain earlier, I believe that any but scientifically sound resolutions of this and other similar issues will be short-lasting and potentially very harmful to both the well-being of the animals themselves as well as that of the food-producing industry of the United States of America. After all, the old saying that "you can't fool Mother Nature" goes for legislation, too; laws that are passed and regulations made and promulgated that do not jibe with the laws of nature will be difficult to enforce, and in the end impossible to justify to the public at large.

Also, I should state that I subscribe unequivocally to the statements made in Modern Veal Production: An Industry Perspective published earlier this year by the Veal Committee of the Beef Industry Council of the National Live Stock and Meat Board. Along with others, I had considerable input in the development of that publication, and I believe it accurately reflects the current state of affairs vis a vis scientific aspects of veal calf husbandry.

As a final prefatory note, anyone interested in ferreting out the facts with respect to scientific justification for some of the concerns about veal calf production techniques that have been expressed by certain members of the public would be well-advised to study not only the summary statements made by authors of papers in the scientific literature, but to study as well the experiments upon which those conclusions are based. The latter do not always serve as legitimate bases for the former.

Following are my opinions about specific points in H. R. 84. I would of course welcome the opportunity to explore any of these points further at the invitation of the subcommittees.

1. Page 2, line 4--"unnecessary physical restrictions": To the extent the veal calf's movement is constrained, this has been the compromise determined to maximize overall well-being of the calves with respect to physiologic, safety, and behavioral needs, as they are understood today.

2. Page 2, line 5--"behavioral deprivation": There is no conclusive scientific evidence that veal calves residing in crates typical of the United States veal industry are being deprived of behavioral needs. In fact, no behavioral need has been scientifically established for veal calves.

3. Page 2, line 6--"impaired health": There is no evidence, either scientific or empirical, to support any statement that veal calves residing in crates typical of the United States veal industry experience impaired health due to physical restrictions. In fact, the health of such calves is superior to that of calves raised in any other system with the exception of the calf hutch system.

4. Page 2, line 9--"causes the animals to become anemic": Clinical

diagnosis of anemia should be made on the basis not only of absolute hematologic values but on the basis of the needs of the animal, as well. The veal calf residing in a crate has less need for oxygen-carrying capacity by the blood because its muscular activity for locomotion is relatively low. Hence, it should not be surprising that calves residing in crates having hematologic values, that would be indicative of clinical anemia in calves residing in a more extensive environment, have no other signs of anemia (e. g., loss of appetite, depressed growth rate, lethargy).

5. Page 2, line 9--"suffer from digestive and other health problems": There is ample evidence that calves fed milk-replacer diets having no added source of fiber do not suffer from digestive and other health problems due to that aspect of the diet.

6. Page 3, line 1--"the smallest dimension is less than the length of the calf, measured from the tip of its nose to the bae of its tail, plus 6 inches": This is an example of law potentially decreasing the welfare of the animal. Has anyone ever observed the behavior of a calf in an enclosure as prescribed here? It is quite possible that providing this much space would indeed encourage the calf to attempt to turn around, but that this much space would not fulfill the calf's dynamic space requirement during turning, hence resulting in the calf's sustaining over time contusions, abrasions, and other traumatic lesions. The "plus 6 inches" is a conventional approach for the housing of dogs in laboratories, and although this prescription for laboratory dogs de facto amounts to "law" nowadays, it is based on empiricism and professional judgement rather than representing design specifications developed from first biological principles.

7. Page 3, line 4--"an appropriate amount of physical contact with other members of the same species": There is no scientific evidence upon which to base the proposed rulemaking. Incidentally, that particular scientific evidence will be exceedingly difficult to generate.

8. Page 3, line 8--"any calf food . . .": Study of the National Research Council guidelines in this regard suggest that again the Department would be asked to make rules in an area where there is still not agreement among scientists.

9. Page 3, line 23--"establish standards . . .": See Point 8 (above).

10. Page 4, line 1--"digestible solid food . . . to maintain the calf in good health": There is abundant scientific and empirical evidence that the health of calves being fed no solid food may be excellent.

11. Page 4, line 3--"standards . . . guidelines": The National Research Council calls their recommendations guidelines. Much ado is made by nutritionists about the difference between allowances and requirements as well as between guidelines and standards. The learned NRC committees and subcommittees dealing with animal nutrition know better than to issue standards, because of the plethora of acceptable arrangements and because the health and well-being of the animals are at stake.

12. Page 4, line 6--"nonanemic dairy calves": Again, the "peaches and oranges" problem; a dairy calf is not a veal calf, is not fed to grow like a veal calf, is not reared in the same kind of environment as a veal calf, and so on. Management systems are designed specifically to achieve the goals of the agricultural production enterprise of interest, and the management system that is effective for one set of goals may not be--and indeed often is not--effective for another.

13. Page 6, line 18--"offspring of a cow . . . less than nine months old": This would include every calf less than nine months old. Special-fed veal calves are ordinarily slaughtered at 16 to 20 weeks of age.

Coda

It would be unfortunate if it were concluded that, because it has been and is now inadequate to the task, science should be abandoned in this matter. If science drops out of our long-term strategy at this point, arguments put forth by people overly concerned for a variety of reasons--repeated time and time--may well make enough sense to enough citizens--inexperienced in and misinformed about agriculture as Americans generally are today--that premature legislative action will be taken. Those who will cast the votes in this matter need to be sure they know what they are talking about. There is the chance in the case of this bill to do as much harm as good to calves being raised for veal.

What we need is more active collaboration between citizens concerned about the welfare of agricultural animals, on the one hand, and agricultural scientists, on the other. When agricultural engineers in the United Kingdom announced they were developing a machine to catch broiler chickens at market time, animal activists there were up in arms. Then respected animal scientists studied chickens that had been caught by hand (as is common in the broiler industry the world over) and chickens that had been caught by an early prototype of the catching machine (Duncan et al., 1986). From results on behavioral and physiologic traits, the scientists concluded that the chickens were frightened and stressed considerably less by the machine than by human catchers. All have benefitted--the farmer, the chicken, and the consumer--and the animal activists have become advocates of the broiler catching machine, because they have seen progress come about. Progress, incidentally, that would not have come about had the scientists not continued their work despite the activists' initial protestations.

Of course, in terms of the quality of animal care, some farmers do a better job than others using the very same system of production. So we should not generalize from poor husbandry situations to condemn outright some particular way or means of caring for animals.

It is true, however, that some kinds of production systems do require more careful design and operation to ensure the well-being of the animals. A high level of management quality is crucial with the more technologically sophisticated systems of animal production. Here we need more knowledge, and this will come to hand only through scientific research and the wise exercise of profesional observation and judgement.

If there is more to learn about agricultural animals' needs and their fulfillment--and I certainly believe there is--then the way forward surely must be to do more scientific research on farm animal welfare. If the people of this country want assurances that farm animals are being treated humanely, then the only valid way to find out is to document scientifically the effects different production systems now in use and proposed for use have on the various elements of the animals' well-being as well as some rational estimate of their overall well-being, taking into account all of the needs and feelings of the animals. Without this knowledge at hand, one person's opinion is as good as the next one's, and progress will not be made.

The two subcommittees of the House Agriculture Committee which are conducting this hearing are the most likely bodies to initiate new federal support for the scientific research that is utterly essential if we are to learn enough about farm animal welfare for agriculture and other elements of society, working together, to strike the inevitable compromises and draw the lines that will define the limits of these animals' respective welfare plateaus. Political solutions to these real questions that might be made in the absence of this critical knowledge would, I am afraid, have as much chance of reducing animal welfare as enhancing it.

Thank you again for affording me the opportunity to share my opinions on these important matters.

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HR 84 Testimony

Good afternoon Senators, I am Dr. Ted Friend, from the Department of Animal Science at Texas A&M University. I am a native of New York State, received my B.S. degree from Cornell University and my M.S. and Ph.D. degrees from Virginia Tech, majoring in Dairy Science. After completing my degree, I was employed by the Virginia Extension Service to evaluate calf rearing systems in Virginia before moving to Texas 10 years ago. I have also raised veal calves commercially.

I have been asked to inform you of the results of our research on calf housing and how it relates to current practices in agriculture.

In 1982, the U.S.D.A. funded 13 Animal Care Studies on Livestock Production Systems. Our studies determined the effects of maintaining calves under varying degrees of confinement. Our research team consisted of Dr. Gisela Dellmeier, Research Scientist at Texas A&M and Dr. Edward Gbur, who is presently Head of the Agricultural Statistics Laboratory at the University of Arkansas.

The results of this research have been published in 2 scientific articles in the J. of Animal Science in 1985, and 1 scientific article in The J. of Dairy Science in 1987. The articles had to pass a rigorous scientific peer review conducted by the respective Journals prior to publication.

We raised Holstein bull calves in conditions of varying confinement ranging from crates, in which they could not turn around, to groups on small pastures. Each calf's hormones, adrenal gland function, immune system, blood chemistry profile, health and behavior were determined.

Our results showed that calves have a strong drive to move or exercise that is blocked by chronic close confinement. The studies also found that maintaining calves in close confinement causes adverse physiological effects that alter metabolism and reduce the ability of the calf's immune system to respond to disease. All of these are changes in the body that are indicative of chronic stress. The crated calves required approximately 5 times more medication than those in less confining environments.

These findings are consistent with studies conducted by such internationally recognized scientists as: Robert Dantzer at the University of Bordeaux, in France, and John Webster and Claire Saville, University of Bristol, in England.

Our results are also consistent with common practice on dairy farms. Calves raised on dairy farms usually receive little, if any antibiotics, whereas, veal calf formulas must be heavily medicated, if not by the feed company, then by the individual veal producer.

Also, I know of no state dairy extension specialists who recommend that calves raised on dairy farms for herd replacements be raised in crates, similar to milk fed veal - the rate of illness is simply too high. For example, take

University of California's Extension leaflet No. 2327, entitled "Modified Elevated Calf Pens". It was written in 1982 and is still being distributed. It says that there is little doubt that crates place more stress on a calf than does a roomier pen, citing excessive death losses from pneumonia, sore legs, swollen joints, etc. The leaflet simply requests that calves be allowed, and I quote "more room and the use of a comfortably bedded area...." This "greatly enhanced the chances for calf livability in the elevated, slotted floor type pen."

To summarize, our studies found that maintaining calves in crates is physically detrimental to the calf, something that is common knowledge in the industry.

These studies were funded by the USDA, passed a rigorous USDA and scientific review, have been published in the most reputable journals in the World, and lastly, these results, from carefully controlled scientific studies, are congruent with common animal husbandry wisdom and other related studies. The only people who have criticized this work are those called to defend the rapidly dwindling portion of the veal industry that still insists on using an out-dated means of production.

Thank you for your attention.

TESTIMONY OF DR. CLAIRE SAVILLE

Mr. Chairman, I am Dr. Claire Saville from England. I have a BS degree in Animal Science and for my PhD degree at University of Bristol I studied the behavior of calves raised in different systems of husbandry plus aspects of veal production. Over the Past 11 years I have been involved, together with other scientists including Professor Webster, in research concerning farm animal welfare. Our work with calves has been published and has provided a factual background for legislation in the UK and Europe.

In testifying today I would like first to mention the general principles on which we base legislation in the UK and then to look at 5 main requirements for veal calf welfare.

The preface to the UK codes of recommendation for the welfare of livestock begins & I quote "The basic requirements for the welfare of livestock are a husbandry system appropriate to the health and, so far as practicable, the behavioural needs of the animals and a high standard of stockmanship."

In starting to define these requirements my colleagues and I consider at the least a calf should be allowed 5 fundamental freedoms. These are freedom from

1. Hunger and malnutrition
2. Thermal and physical discomfort
3. Injury and disease
4. Fear
5. The freedom to express most normal patterns of behavior

Research work has identified abuses to each of these 5 freedoms in crated veal production systems. In general terms we support HR 84 as is seeks to reduce many of these abuses.

I will now consider in more detail some of the violations of these 5 freedoms.

1. Cattle have 4 stomachs rather than 1 as in humans. These allow them to digest large quantities of herbage. Depriving calves of solid feed not only arrests development of their normal digestive system but also prevents a normal pattern of oral behavior. The formation of hairballs, indigestion and diarrhea are common.

2. The notion that veal meat should be white or pale has arisen from a quirk of nature. Cows milk is normally deficient in iron. Having developed the science and technology to recognize, treat and prevent anemia with supplemental soluble iron should we not also develop an enlightned attitude rather than unthinkingly accepting our peasant heritage. I know of no evidence that providing adequate levels of iron in the feed of calves affects the taste of veal meat.

3. A veal calf grows phenomenally fast--at similar body weights to an average adult human may be gaining 7 lbs per day. This generates a lot of excess body heat so to be thermally comfortable the calf should be in a well-ventilated environment that is not overcrowded. An efficient posture for calves to lose heat is to lie with limbs outstretched on their sides. Our behavioral observations have shown that suckler calves and loose-housed veal calves spend about 65% of the 24 hour day lying down and more than 5% of this time lying out flat.

4. One of our studies in 6 commercial crated veal units showed 1 in 5 calves to have knee injuries of which 3% were deemed serious enough to require treatment.

5. Calves should be inspected regularly and where housed kept in sight and sound of usual farm activities. If they are confined in quiet, dark areas they do not remain still and calm but rather they over-react fearfully to the slightest movement or sound and panic when touched.

6. Calves confined in crates less than 26 in. wide after about 10 weeks no longer have sufficient space to adopt their most common posture for sleeping-i.e. with their heads tucked round into their flank. Veal calves in crates were observed to sleep about 8% of the day whereas those in yards with more space slept twice as much.

Most oral activity of crated veal calves given only a liquid diet appears purposeless. Their social contact and play behavior is very limited.

They are unable to groom themselves or each other fully something that is important to their health and well-being.

In conclusion, our research and that of other calf experts, demonstrates that crated veal is not a system of husbandry appropriate to the health and behavorial needs of calves.

FREEDOM FROM MALNUTRION

1. Digestive system of cattle evolved for large quantities of herbage. Denying calves solid food causes abnormal development and health problems.

2. Cows milk is deficient in iron but calves would normally graze and supplement it.

No evidence that adequate levels of iron in diet affect taste of veal meat.

FREEDOM FROM THERMAL AND PHYSICAL DISCOMFORT

1. A veal calf grows fast and gets very hot.
Needs space-lying flat is good posture.

2. Young calves find the slatted floors of crates uncomfortable and lie down less than normal.

FREEDOM FROM DISEASE AND INJURY

1. Respiratory disease is a major health problem in most crated veal units.

2. In our studies 1 in 5 crated veal calves has knee injuries. 3% of injuries were severe, needing treatment.

FREEDOM FROM FEAR

1. Veal calves kept in crates in the dark show fear of the slightest movement or sound and are difficult to handle.

Need to be kept in well-lit areas exposed to normal sights and sounds with frequent visits from stockman.

FREEDOM TO EXPRESS MOST NORMAL BEHAVIOR

1. Narrow crates do not allow older veal calves the space to sleep with the head tucked round to their flank.

2. Veal calves in crates with no solid food show abnormal oral behavior. They chew and lick their crates and themselves more than calves given dry feed and pretend to ruminate.

3. Individual crates limit opportunities for social contact and play behavior.

4. Grooming is a very basic behavioral need. Narrow crates do not allow calves the space to do this adequately and keep their coats clean.

STATEMENT ON

H.R. 84
"Veal Calf Protection Act"

Before

U.S. House Committee on Agriculture
Subcommittee on Livestock, Dairy, and Poultry

by

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My name is John J. McGlone, and I am associate professor of animal science at Texas Tech University. My responsibilities include teaching and conducting research on animal management, animal behavior and animal stress. I also serve as Section Editor for the Journal of Animal Science, Environment and Behavior section.

I appreciate this opportunity to share with you my opinion on scientific matters regarding proposed legislation designed to improve the well being of veal calves.

I will provide what seems to be the state of scientific knowledge for each major component of the legislation. Then, a recommendation will be offered.

For each major component of H.R. 84, the primary question would seem to be: Will this legislation improve calf well being? If the answer is "no", or "we are not sure", then this legislation should not be passed. If the answer is yes, then the legislation should be passed.

Animal Scientists hope that any legislation is based on sound scientific evidence regarding calf well being. In the absence of sound scientific evidence, such evidence should be obtained before calves' well being and farmers' livelihood are placed in peril. It is indeed a shame that more scientific evidence is not available on issues of farm animal well being. Funding agencies and research organizations have not made animal care a priority research item to the extent appropriate.

Overview of the Veal Industry

The veal industry is a small segment of American agriculture. It seems there are about one million calves fed each year in the U.S. for the special-fed market. Because of its small size, it is a relatively easy target for advocate groups that seek to reduce or eliminate use of animals by humans.

The American veal industry was smaller and less organized 30 years ago. Then, with a surplus of calves and milk products, the veal industry found a niche.

The consumers most served by the veal industry include certain ethnic groups and white table cloth restaurants. Typical grocery store sales are less important to the veal industry than to the beef, pork and poultry industries.

Veal consumers desire calf meat that is pale in color, relative to beef. This pale color assures the consumer that the calves were fed a milk-based diet, or alternatively that they have not been fed a diet containing forage. The pale meat color is brought about by feeding diets, for short periods, that are marginal in iron content (enough iron to prevent full anemia). Feeding a diet containing forage slows calf weight gain (older calves are more likely to be less tender) and changes the taste and texture of the meat.

The special-fed veal industry takes advantage of surplus male calves, primarily Holstein. They are fed liquid diets containing milk products and other animal and plant products. Dietary iron is supplied during the early stages of growth, but supplemental iron is left out of the milk replacer diet fed during the later weeks to create the pale meat color.

If the special-fed veal industry was eliminated today, it would cause a strain on the dairy industry. Calves would be sold for less money and less milk products would be fed to calves--thereby creating a greater surplus of milk products. Of course, there would be a strain on the families of veal farmers and their allied industries. Many calves would be disposed of shortly after birth, if the veal industry did not exist.

If the veal industry simply changed, rather than being eliminated, the strain on the veal and dairy industries would be relative to the degree of change required. In my opinion, economic strain on the special-fed veal industry induced by legislation is only justified if calf well being is certain to improve.

Space

Space requirements of livestock are poorly understood, with the exception of space effects on animal performance (weight gain and efficiency). The space requirements for normal postural adjustments are not known for American Holstein calves of any size or age.

Such studies are possible and have been performed on other animals (see Curtis et al., 1989 for sow space requirements). Without any scientific evidence to support the H.R. 84 requirement that calves be given a pen that is at least the calves length plus 6 inches, this level of space could compromise, enhance or have no effect on calf well being--there is no way to predict ahead of time.

For example, suppose that a calf was given exactly its length plus 6 inches in a square pen. This, in fact, may not be enough room to make normal postural adjustments. If so, calf well being may not be enhanced, while many veal producers may be forced out of business.

Recommendation. Do not create laws until the space requirements of calves (and other animals) are better defined, by sound scientific investigations.

Social Interaction

Calves are socially isolated to allow individual-animal tailoring of feed intake, to reduce behavioral problems and to minimize disease transmission among animals (which is common when animals are brought together from many farms). Disease reduction, particularly enteric and respiratory diseases, is the main advantage of individual housing. The Council for Agricultural Science and Technology (1981) reviewed several studies which showed that calf mortality was only one-third as high on veal farms (less than 5%) than among typical dairy herd replacement animals (15 to 20%). Thus, the decision comes down to: is it better to be alive in an individual stall or to have suffered an infectious disease in a social group?

Calves on most veal farms are not socially isolated. They are able to interact with calves in adjacent stalls. The degree to which only limited social contact causes stress among calves is a subject of controversy (see Friend et al., 1985 and Dellmeier et al., 1985 vs. McGlone, 1989 for contrasting views on the subject).

Calves housed in individual stalls had higher numbers of some white blood cells (neutrophils, for example) than calves in pens. This was taken as additional evidence that stalls were stressful compared with pens (Friend et al., 1985). This point illustrates the narrow view taken by one group of scientists on issues of calf welfare. Of interest is a more recent paper that reported calves nursing cows had higher numbers of neutrophils than calves in stalls (Reece & Hotchkiss, 1987). Thus, in view of the more recent evidence, and assuming calves are better off (psychologically) nursing the cow than in a stall, higher neutrophil numbers might even indicate enhanced well being.

Friend & Dellmeier, (1988) reviewed studies on individual vs. group housing of calves and concluded:

> "Although calves maintained in groups with sufficient space to
> perform all of the bovine fixed action patterns exhibit
> fewer behavioral and physiological indices of stress,
> they are nonetheless subject to other management problems."

There is considerable disagreement with the conclusion that calves in pens are less stressed than calves individually-housed in stalls. Each housing system (group and stall) has disadvantages. To move the special-fed veal industry from stalls to pens would not automatically enhance calf well being; and, it could actually lower overall calf well being.

Recommendation. Because calves may be worse off (in terms of health and survival) in group housing systems than individually-housed calves, legislation should be postponed until better housing systems are available--housing systems based on sound science. If people feel empathy towards animals in individual stalls they should work to find funding to seek viable alternatives that are known to improve calf well being, rather than throwing out the current system and risking depressed well being.

Solid Food

What is solid food? Green beans are 92% water while whole milk is 87% water (Ensminger et al., 1986). A diet of milk replacer would be considered liquid, but it would have more "solids" than green beans. Modern special-fed veal calves are not generally given access to solid food such as forages or grain.

Bovine calves (beef and dairy) do not naturally consume very much solid food during the first few weeks of life. One study reported that free-choice grass intake decreased as calf milk consumption increased (Hodgson, 1971). Calves ate more solid feed if milk intake was limited, but with ad libitum milk consumption, calf forage intake was negligible for the first four weeks of life.

Calves drink milk from their mother, and slowly over the first few weeks of life, they begin to eat some solid food. A precise estimate of natural weaning age is not known for bovine. Certainly, the one-day-old calf consumes little or no solid feed and the six month old calf consumes a great deal of solid food, even when it is nursing its mother.

Because young calves don't eat appreciable quantities of grain or forage food naturally during the first week of life, the sufficient supply of solid feed (as stated in H.R. 84) would be no dry feed at all. Veal calves grow and remain healthy on diets containing adequate nutrients regardless of how liquid or solid their food may be (within reasonable limits).

If the objective of this part of the legislation is to provide fiber for rumen development, logical methods to provide such fiber to veal calves include, at least, two methods. First, fiber could be added to milk replacer diets (like fiber products humans mix in water or milk). Fiber products have been added to milk replacer diets with varied success (Gorrill, 1970). Second, grain or forages could be provided to these calves. Neither feeding method has been compared with a milk replacer diet in an evaluation of calf well being. What is natural, is for calves to consume only liquid feed the first few weeks of life, a mixture of solid and liquid feed the next few weeks and only solid feed at some later age (complete data not available for a specific recommendation). However, there is no evidence that this more natural feeding schedule improves calf well being.

Providing certain solid foods to calves will depress calf well being. Calves are known to become allergic to soybean proteins (Dawson et al., 1988). The resulting allergic reaction takes the form of depressed weight gains, damage to the gastrointestinal tract and an immune reaction to vegetable proteins. Thus, provision of some types of solid foods (and perhaps many types of solid food) to the young calf may actually harm the calf.

Recommendation. Because calves grow and remain healthy on either liquid or solid food up to several weeks of age, the degree of moisture in calf feed should not be legislated. In the absence of complete scientific evidence, any legislation regarding solid or liquid feeds could improve or compromise calf well being--there is no way to predict the effect of such legislation on calf well being.

Iron

Calves require iron for blood hemoglobin, muscle myoglobin and other bodily needs. Iron contributes to the red color of blood and muscle. The hemoglobin molecule contains four iron atoms and functions to transport oxygen from the inspired air to hemoglobin to tissues of the body. Hemoglobin has a high affinity for oxygen and can draw oxygen from the inspired air. Muscle myoglobin has a greater affinity for oxygen than does hemoglobin. Thus, as hemoglobin passes near myoglobin, oxygen moves from hemoglobin to myoglobin. Iron intake is correlated with blood hemoglobin concentration up to a certain intake.

The priority of iron metabolism is first for hemoglobin and next for myoglobin. This means that a calf with "full" iron stores in its body will have red muscle and a high blood hemoglobin concentration. As blood iron declines (through lower iron intake), muscle myoglobin is decreased at a more rapid rate than is blood hemoglobin. The more iron that is taken in (by mouth or injection), the higher the blood hemoglobin, up to some point. Blood hemoglobin rarely exceeds 15 g/dl. Providing more iron beyond the level required to maintain hemoglobin can lead to toxicity (NRC, 1989; NRC, 1980).

Figure 1 illustrates the range of blood hemoglobin concentrations found in several research reports. In general, there are three levels of body iron stores possible: (1) full iron stores (red muscle and high hemoglobin), (2) borderline anemia (pale muscle and lower hemoglobin) and (3) anemia (pale muscle, very low hemoglobin, increased heart rate, increased breathing rate to get more oxygen to tissues and depressed health). Anemia is typically of the microcytic, hypochromic type (reduced numbers of red blood cells and reduced hemoglobin concentrations). Most veal producers hold calves at the second level during only the later stage of the production cycle, with strict measures taken to avoid the third level (full anemia).

Only a few research projects have investigated the physiological adjustments made by calves on low iron diets. More than 10 years ago, Bremner et al., (1976) reviewed the literature on anemia in veal calves and speculated that the level of anemia among special-fed veal calves was not likely to influence their ability to make physiological adjustments in their environment or when transported to slaughter.

More recently, Reece (1984) measured heart rate and respiratory rates among calves on various veal-like management schemes. Hemoglobin levels obtained were 11, 6.6 and 4.7 g/dl. Calves with 6.6 or 4.7 g/dl hemoglobin had faster heart rate, especially after exercise, than calves with 11 g/dl blood hemoglobin. These data support the idea that, when calf blood hemoglobin concentrations fall below 7.0 g/dl, physiological adjustments are required. However, physiological adjustments required (if any) for calves with 7 to 10 g/dl have not been described, to my knowledge.

Measures of behavior have been collected for calves on different special-fed diets. Dietary treatments, even those that caused hemoglobin levels of 6.1 g/dl, caused no behavioral changes relative to calves with higher (14.2 g/dl) blood hemoglobin concentration (McFarlane et al., 1988).

Weight gains and feed intake of calves fed diets that were very low in available iron (10 ppm) were found to be less than for British calves fed higher (over 20 ppm) levels of iron (Roy et al., 1964; Webster et al., 1975). However, a study with similar treatments did not replicate this finding in America (McFarlane et al., 1988).

General health of calves fed all levels of iron in papers reviewed in this section was generally good. Borderline anemia of veal calves does not cause serious health problems. Other work would be needed to discover subtle changes in calf physiology or immune function when fed typical special-fed veal diets.

Factors that influence blood iron-hemoglobin. Note that young calves range in hemoglobin level from 9.5 to 12.5 g/dl at the start of the first four studies summarized in Table 1. And, calves nursing their mother with access to hay and grain had blood hemoglobin concentration of 9.0 g/dl (Reece & Hotchkiss, 1987). Calves which nursed their dams had lower hemoglobin levels than calves that received iron injections because of the low iron content of milk.

Data summarized in Table 1 provide evidence of some factors which influence blood hemoglobin concentrations. In the first citation (Reece and Hotchkiss, 1987), calves had the same blood hemoglobin on weeks one to four when fed milk replacer and housed in crates or pens, or when nursing their mother with access to hay and grain. In the third treatment, calves were fed a limited amount of milk replacer, which encouraged consumption of grain and hay. This treatment resulted in higher blood hemoglobin in the fourth through 15th weeks. From the eighth through the 15th weeks calves nursing cows and eating hay and grain had similar blood hemoglobin and calves in these two treatment groups had higher hemoglobin than calves fed the milk replacer. Housing calves in crates tended to lower blood hemoglobin in the final weeks compared with housing calves in pens (Reece and Hotchkiss, 1987; Welchman et al., 1988). While reasons for this are unknown, penned calves may have greater access to feces and pen materials that contain iron. Alternatively or in addition, confinement in the crate may lower blood hemoglobin.

Providing bedding to veal calves is a potential source of added dietary iron. Early researchers avoided bedding when calves were fed a milk diet because calves would consume bedding which could cause digestive problems (Niedermeier et al., 1959). Although bedding is known to contain iron which may increase blood hemoglobin (Welchman et al., 1988), some sources of fiber may act as iron chelators, thereby binding iron and lowering blood hemoglobin concentration (Bernier et al., 1984).

Presented in Figure 2 are hemoglobin values for calves that could be observed in several management schemes or treatments. Injecting iron or feeding only iron-rich feeds elevated blood hemoglobin above the concentration found in calves nursing their mothers. On the other extreme, calves fed only milk (which is naturally deficient in iron), have progressively lower blood hemoglobin concentrations. Examination of research data presented in Table 1 shows that, in different studies, blood hemoglobin concentrations of calves fed milk-based diets (presumably with no supplemental iron) was less than 7 g/dl (and as low as 4.6 g/dl).

Special-fed veal calves have a hemoglobin concentration over time that differs from calves on most other treatments. Special-fed calves have high iron during the first few weeks of life, then the iron is deleted from their diet. Slowly, blood hemoglobin drops.

Most likely, veal calves are not the only animals that show temporary borderline anemia. Beef calves, lambs, piglets and humans (babies and menstruating women) are often anemic. Should Congress outlaw borderline anemia in all animals, including humans?

Defining the iron requirement. Authors' opinions vary on what they consider normal, borderline anemia and full anemia. One source puts normal blood hemoglobin at 13 to 15 g/dl (Swenson, 1984), while another states normal calf hemoglobin is 11 to 12 g/dl (Underwood, 1981). An examination of data in Table 1 shows that reported values range much more than those reported as normal by Swenson (1984) and Underwood (1981). Hays and Swenson (1984) recognized a depression in blood hemoglobin in the newborn animal and called it "physiological anemia" (implying some degree of normalcy in this temporary state). Physiological anemia (see Figure 2 also) is thought to be caused by low iron stores at birth and the naturally low iron concentration in milk.

"Normal" hemoglobin concentration for adult cattle on traditional diets can be said to be 9.0 g/dl or more. With laboratory analysis errors, even a blood hemoglobin of 8.0 g/dl might be considered normal (as indicated by Long et al., 1952). One British group recently suggested that 9.0 g/dl should be considered borderline anemia (Welchman et al., 1988). Underwood (1981) considered 8.25 g/dl clearly anemic while 5.5 g/dl blood hemoglobin induced "clinically obvious functional disabilities." In scientific reports, a blood hemoglobin level below 7 g/dl is generally considered a level that causes depressed feed intake, weight gains and physiological symptoms like increased heart rate (Bremner et al., 1976; Reece, 1984).

Documentation of the level of anemia among special-fed veal calves is lacking. For dairy animals, NRC (1989, p. 33) states, very clearly:

> "The iron requirements of ruminants are
> not well established."

Other authors agree on the poorly defined iron requirements of calves (Underwood, 1981). If a committee of dairy nutritionists came to that conclusion, then it does not seem prudent to establish standards for iron taking "into account the calf-feed guidelines established by the National Research Council for the production of healthy, nonanemic dairy calves;" (4.b.1-2). Furthermore, the NRC dairy nutritionists that wrote those guidelines did not intend their work to become law. In a legislative context, nutritionists may come up with different guidelines.

Recommendation. It seems that the level of blood hemoglobin at 16 to 20 weeks of age for calves on typical special-fed diets is in the range of borderline anemia. The industry might be encouraged to minimize the time during which calves are in this borderline anemic state. However, there is no evidence that being borderline anemic represents being in a state of poor well being. Poor well being, to the extent that causes depressed food intake and gain would not be in the best interest of veal producers. Most authors would agree that a state of full anemia (which is not the case in special-fed vealers) would represent depressed well being because (A) health of anemic animals is reduced, (B) cardiac and respiratory compensations must take place and (C) anemic animals would be easily tired when exercised. Thus, H.R. 84 is so poorly defined on the issue of anemia, and the research so inconclusive, that H.R. 84, if enacted would be meaningless.

Congress may want to outlaw full anemia. Or, Congress may want to outlaw full and borderline anemia. If Congress intends to outlaw borderline anemia to improve calf well being, it first must have more scientific evidence to determine physiological and behavioral responses among calves with levels of blood hemoglobin between 7 and 11 g/dl. And, there must be sufficient scientific evidence to clearly define anemia in calves.

Final Recommendation

The theme running through this testimony is the tremendous scarcity of data on issues of animal welfare. Our own USDA funds little work, internally or externally, on direct projects of animal care. It seems appropriate to have legislation which funds research to generate the answers needed on these issues. Congress, starting with the committees meeting today, could draft a bill to establish a long-term research effort in farm animal care with internal and extramural competitive funding dollars authorized to the USDA. Then, bills with intentions to improve animal well being can be based on sound science rather than anthropomorphism.

Table 1. Hemoglobin concentrations of calves.

			Blood Hemoglobin, g/dl				
Citation	Treatment	Age, weeks:	0-2	4	8	12	14-18
1[a]	Milk r.--crate		11.2	9.0	7.0	5.9	5.0
	Milk r.--pen		11.8	9.2	7.8	7.0	7.2
	Milk r. + hay & grain		12.1	11.3	10.5	11.0	10.4
	Nursing cow		10.1	9.0	10.3	10.3	10.4
2	Milk r. + 0 iron		9.7	8.9	6.6	5.9	6.1
	[b]Milk r. + 100 ppm iron		9.5	8.9	9.4	10.0	14.2
	[c]Milk r.--Hi-Low		9.8	9.7	8.5	6.5	7.3
3	Milk r.--crate		11.6	--	--	--	7.8
	Milk r. + solid--crate		12.2	--	--	--	9.7
	Milk r.--pen		12.5	--	--	--	9.0
	Milk r. + machine--pen		12.5	--	--	--	9.2
	[d]Milk r. + machine--pen		11.3	--	--	--	8.7
	[d]Milk r. + solid--pen		11.3	--	--	--	12.4
4	Milk r.		12.0	--	--	--	5.2
	Milk r. + fiber		9.6	--	--	--	4.6
	Milk r. + iron		10.6	--	--	--	10.8
	Milk r. + iron + fiber		10.1	--	--	--	7.4
5[a]	Nursing--range		13.0	12.0	13.5	14.2	15.5
	Nursing--range + iron		12.8	13.8	13.6	15.0	15.5
6	Milk		8.05 (after six weeks on				
	Milk + iron + copper		15.31 experimental diets)				
	Milk + solid food		10.96				
	Milk r. + solid food		10.41				

r. = milk replacer; solid = solid, dry feed, usually grain and forage;

[a]Extrapolated from figures in original papers.

[b]NRC requirement or above.

[c]Typical U.S. veal-industry diet; high iron first few weeks, then no added iron in later weeks.

[d]Different genotypes were used in these treatments.

1 Reece and Hotchkiss, 1987. Third treatment was milk r. + hay and grain for four weeks followed by a hay-grain diet for remaining 11 weeks. Iron was added to the milk r. in unspecified amounts.

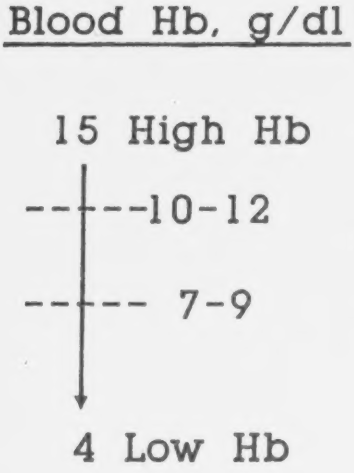
2 McFarlane et al., 1988.

3 Welchman et al., 1988.

4 Bernier et al., 1984. Fiber source was a citrus product, other fiber sources were tested.

5 Rice et al., 1967. Beef calves nursing their mothers on pasture.

6 Niedermeier et al., 1959. Milk=whole milk, solid food=grain and hay



Normal to high Hb	Healthy calves, high Hb, high muscle myoglobin, good appetite, weight gains and cardio-pulmonary system
Borderline anemia	Healthy calves, borderline Hb, lower muscle myoglobin, good appetite and weight gains (cardio-pulmonary system remain untested)
Anemia	Unhealthy calves, if pathogens present, lower muscle myoglobin, poor appetite and weight gains, increased heart rate and possibly respiratory rate

Figure 1. Range of blood hemoglobin (Hb) concentrations found in calves. When given iron injections or fed iron-rich feeds, calves may have blood Hb of as high as 15 g/dl. Between 7 and 12 g/dl is considered borderline anemia and calves with blood Hb below 7 g/dl are generally referred to as anemic.

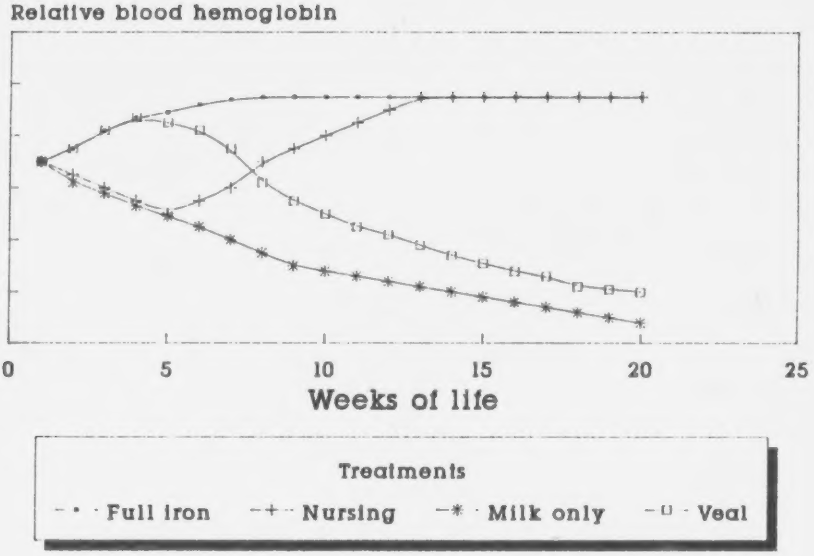


Figure 2. Relative blood hemoglobin concentrations of calves from several experiments. Figure values are theoretical values because no single study had all treatments of interest. "Full iron" represents calves given iron injections or given access only to iron-rich feeds. "Nursing" represents calves nursing their mother and having access to iron-rich feeds. "Milk" represents calves receiving only a milk or milk replacer diet with no added iron. "Veal diet" represents calves on a feeding program targeted for the special-fed veal market, where high dietary iron is provided in veal diets in early weeks, then supplemental iron is not provided in later weeks.

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TESTIMONY SUBMITTED BY

FRANKLIN M. LOEW, D.V.M., Ph.D., DEAN
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Chairman Stenholm, Mr. Gunderson, Chairman Brown, Mr. Roberts, Members of the Committee, I am Franklin M. Loew, dean of the School of Veterinary Medicine at Tufts University, with campuses in Boston and N. Grafton, Massachusetts. I wish to support the principle and most details embodied in H.R. 84, five of whose cosponsors (Representatives Atkins, Donnelly, Markey, Mavroules, and Studds) are members of the House of Representatives from the Commonwealth of Massachusetts.

I hold degrees in both agriculture and in veterinary medicine and for nearly twenty-five years have been involved in agricultural and biomedical practice, teaching, and research, the last nearly eight years at Tufts. As dean of New England's only School of Veterinary Medicine, I deal frequently with many issues which are perceived very differently by rural and urban citizens, as do you. I am currently a member of the National Research Resources Advisory Committee at the National Institutes of Health and the governing boards of numerous other scientific and agricultural organizations, including the Massachusetts Biotechnology Research Institute, the Dean's Advisory Council of the University of Massachusetts College of Food and Natural Resources, and the U.S. Department of Agriculture's Blue Ribbon Advisory Panel for the Animal and Plant Health Inspection Service, and I am a member of the Board of Trustees of the Eastern States Exposition, New England's largest state fair.

In short, animals of all kinds and their care are my life's work.

I speak today as an individual, however, and not as a representative of any of these organizations. I am paying my own expenses to be here today.

In 1972, I wrote the first North American article on the humane aspects of livestock production to appear in a veterinary medical journal.

I support this bill, which would simply require that veal calves be kept in enclosures which, on their smallest side, are at least 6 inches longer than the calf's body length, and that allow at least some appropriate amount of physical contact with other calves or cows. As well, H.R. 84 would require that these calves be fed a diet based on the known nutritional needs of the calf, as established by the National Research Council. Experts at the U.S. Department of Agriculture would actually develop the regulations. It is difficult for me to see how anyone, much less a veterinarian, could oppose such modest requirements.

The veterinarian's oath, as approved and distributed by the American Veterinary Medical Association, of which I have been a member for twenty-four years, states in its largest part:

> "I solemnly swear to use my scientific knowledge and skills for the benefit of society through the protection of animal health, the relief of animal suffering, the conservation of livestock resources, the promotion of public health, and the advancement of medical knowledge."

I just administered this oath to my 1989 graduates and by the end of June, over 2,200 newly-graduated doctors of veterinary medicine will have sworn this oath nationally.

The only possible reason one could have for opposing this bill would be economic, but if it were to pass, the economic playing field would be level, the same for all producers. I know of no scientific evidence which indicates that a stall, pen, or crate which is at least six inches longer - on only its shortest side - than the calf itself, is harmful to a calf. In fact, there is evidence that an even larger enclosure would be more beneficial, behaviorally at least.

In 1988, twenty mainstream agricultural organizations (e.g., American Dairy Science Association, Experiment Station Committee on Organization and Policy, U.S.D.A.'s Agricultural Research Service) sponsored the preparation of a "Guide for the care and use of agricultural animals in agricultural research and teaching" (available from 309 West Clark Street, Champaign, Illinois 61820). It is not directed toward production agriculture, but it does review housing data for veal calves. On page 55 it is stated that "individual veal calf stalls in the United States commonly measure 22 to 24 inches wide and 60 inches long." Calves are usually kept in such stalls for four months. After citing several research papers, the committee reported that, "although some normal behaviors are better satisfied in group pens than in individual stalls, certain abnormal behaviors...actually may increase." The report also observes that "veal calves should be handled with care, gentleness, and patience." In my opinion, a stall size such as that proposed in H.R. 84 would do just that.

There is certainly no scientific evidence that having contact with others of the same species is detrimental to calves; there is much evidence that it is beneficial. And feeding a diet which meets an animal's nutritional needs strikes me as the bare minimum that ought to be required of anyone keeping animals, be they calves, pets, horses, cattle, or swine. To a veterinarian, an animal with a nutritional deficiency is a diseased animal.

The most recent U.S. Department of Agriculture statistics show that in 1987, some 2,680,000 calves averaging 239 pounds in weight were slaughtered under the aegis of Federal inspection. That represents about the same number of calves that were slaughtered in 1982 and 1983, but is down somewhat from the numbers slaughtered in 1984 through 1986. New York led all the states in the number of calves slaughtered in 1988 with 470,500, followed by Wisconsin (368,000), Pennsylvania (275,900) California (271,700), and Indiana (237,600). Those five states account for nearly 60% of all calves slaughtered in this country last year. They are the states with large dairy industries, the source of the calves.

In 1987, the latest year for which figures are available, some 429 million pounds of veal was produced in the U.S., the lowest amount since 1980. By comparison, some 23.5 billion pounds of beef and 14.4 billion pounds of pork was produced.

Not all calves, of course, are so-called "veal calves", and many of those which are raised for the veal trade are raised by conscientious, hard-working farmers under conditions which already exceed the requirements of H.R. 84. These farmers would not be affected by this bill's provisions. Legislation such as the bill under consideration here would be unnecessary if farmers' organizations were to develop an effective system of self-regulation. "Good" farmers can recognize "bad" farmers right away.

I testified against a farm animal referendum in Massachusetts last year, partly because I believe that if this sort of legislation is in fact the will of the American people, it must be national in scope. If done on a state-by-state basis, farmers in neighboring states would have an economic advantage over those in the state with legislation. The Massachusetts referendum was flawed in other ways which also led me to oppose it.

I am surprised at those opponents of H.R. 84 who argue privately that while this bill is not really so bad, its passage will lead the way to other, surely more radical legislation. I cannot say whether this would be the case or not.

But there were those who once said that "organic farming" was nothing but a crazy idea. Today, the issue of pesticide use in agriculture is one of the most controversial of public and Congressional concerns. Similarly, there were those who said that direct marketing of farm produce to the public by farmers themselves would never work. Such critics now are, so to speak, eating their words. Likewise, I believe our urban America (98% of our population is non-farm) is now turning its attention to the ways in which some types of farm animals are raised. And of these, I believe that the ways some - not all, by any means - veal calves are housed and fed are such that this bill is required. Even the humane slaughter act was opposed by some in the industry, and there are individuals and organizations which still oppose the pasteurization of milk and the flouridation of water.

It is time for agricultural and veterinary medical scientists to join with broad-based humane organizations in dealing with issues of mutual concern in animal agriculture. I was delighted when, in 1988, the Denver, Colorado-based American Humane Association reached out to the scientific community and asked me to form and chair a new Scientific Advisory Panel for it.

The scientific issues raised by H.R. 84 are, in my opinion, clear: nothing but good for the animals in question will come from enactment of its provisions, and I believe that the consumers who have stopped purchasing veal will return to it if this bill is passed.

We live in changing times: less than 2% of the American population lives on farms, and their average incomes are not high. Any changes in the ways farm animals are raised that are brought about by changing sensitivities on the part of the over 98% of Americans who live in cities and towns and buy their products should not come at the expense of our remaining farmers. If farm animals need better treatment, then so do our farmers. Let's devise ways of helping them both. This bill would help the calves.

I would be pleased to answer any questions you may have.

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STATEMENT OF THE

AMERICAN VETERINARY MEDICAL ASSOCIATION

ON THE

VEAL CALF PROTECTION ACT

PRESENTED BY

KEITH E. STERNER, DVM
PRESIDENT,
AMERICAN ASSOCIATION OF
BOVINE PRACTITIONERS

JUNE 6, 1989

Mr. Chairman and Members of the Committee:

My name is Keith Sterner. I am a veterinarian from Ionia, Michigan who specializes in bovine practice. I am pleased to appear before you today on behalf of the American Veterinary Medical Association (AVMA) and to share our concerns about the Veal Calf Protection Act. AVMA represents nearly 50,000 veterinarians across the country. I am also the President of the American Association of Bovine Practitioners, an organization of 5000 veterinarians with a professional interest in the health and welfare of cattle. My remarks will represent the views of that group as well.

My 17 years of experience in bovine practice have offered me a varied perspective on the many facets of raising cattle for a wide range of purposes. Ninety-nine percent of my practice time is spent dealing with cattle. Although the majority of my time is spent working on dairy cows, I also have several clients who raise beef cattle and veal calves.

Veterinarians are strong proponents of animal welfare; however, the profession categorically rejects the notion of animal rights. One of the largest challenges in discussing the animal welfare issue lies in keeping the terminology clear, unambiguous and depoliticized. The definitions of animal welfare, and animal rights, are often blended in the popular press and in political dialogue, which confuses the strong distinction that should be made between the terms.

The animal welfare issue is complex and often evaluated on anthropomorphic and emotional grounds rather than on a factual, scientific, rational basis. I firmly believe that it is essential to determine the status of an animal's welfare on science and fact rather than emotion and potentially flawed perceptions.

Ascribing rights to animals implies that humans should not be able to use animals toward human ends, or for any other purpose which does not benefit that individual animal. Accepting the notion of animal rights, therefore, eliminates the possibility of animal use for food, biomedical and veterinary research, recreational sports and even, extended to its logical end, the keeping of animals as companions. The concept of using animals for human ends (food, biomedical research, companionship, etc.), minimizing pain and suffering and enhancing the well-being of the animals during their lifetimes, is compatible with the precepts of animal welfare, not animal rights, and is the philosophy strongly embraced by the veterinary medical profession and myself. Indeed, all veterinarians take an oath which affirms our commitment to the protection of animal health and the relief of animal suffering.

Good livestock and poultry producers are increasingly attentive to the welfare of their animals. The animal's health and welfare and the health and welfare of the producer's business are inextricably entwined. Even in the absence of other scientific, moral, ethical and philosophical values, attitudes, and concerns, the producer's success depends heavily on the welfare of the animals under his or her stewardship. Producers are more knowledgeable about the health and welfare of their charges than were their counterparts in the past. I believe that this trend toward greater professionalism in all aspects of livestock and poultry production, including a sensitivity to animal welfare, will continue.

The veterinary medical profession strongly opposes the inhumane treatment of veal calves and other animals. AVMA recognizes that veal calf production can and should be humane and improve the welfare of calves. Toward that end, the association's Animal Welfare Committee developed an AVMA Guide for Veal Calf Care and Production. The goal of the guide is to help producers raise healthy calves in a humane manner. The guide is flexible in order to maximize its adaptability to a variety of management systems. A copy has been appended to this statement.

I would like to outline the most important considerations in veal calf care and production. First and foremost, flexibility in designing and implementing management systems is essential. That is why the AVMA guidelines were written to fit a variety of production environments. I encourage veal growers to cooperate with veterinarians and other knowledgeable experts to explore various health care, nutrition and housing systems, in order to maximize the health, welfare and productivity of the animals under the producer's care.

AVMA maintains that confinement rearing may provide opportunities to enhance the health and welfare of veal calves because it facilitates frequent observation and careful monitoring and control of the animal's health and nutritional status. Confinement rearing can also protect animals from adverse environmental conditions, parasites and predators.
Appropriate management by the producer determines whether veal calves live or die, thrive or fail. It is proper management, and proper management alone, that can prevent disease by intervening in the relationship between the infectious agent and the veal calf.

Health is predicated on proper management practices and attention to detail. Calves don't die from lack of exercise; they die from respiratory infections and enteric disease. Good health maintenance is predicated upon keeping the number of pathogenic organisms down and the strength of the animal's immune system up, through proper feeding and housing practices.

One of the fundamental practices which determines the eventual health of the calf is something the veal producer cannot control --the quality and quantity of colostrum that the calf receives within the first hours of life. It is vital that every calf receive colostrum as soon as possible after birth and for the next few days. Calves are born iron-deficient and with an immature immune system. Colostrum provides them with the iron, vitamins and the maternal antibodies necessary to survive. Without this crucial ingredient, the neonate all too frequently falls prey to diseases and often, death.

The maturity and strength of a calf's immune system will vary directly with the quantity and quality of the colostrum that calf received at birth. Likewise, the ability of a calf to survive contact with other calves is a direct function of the effectiveness of its immune system. I am an isolationist at heart. Fundamentally, I believe that young calves should be kept in strict isolation, and at a minimum, I prefer to see calves offered strictly limited contact with other calves in order to minimize their exposure to pathogenic organisms. Although calves are herd animals, their need for socialization must be carefully balanced against the likely transfer of disease. In my judgment, isolation is both appropriate and desirable to minimize the incidence and spread of disease.

The basis of a sound health program for a veal calf production unit is a regular veterinarian-client-patient relationship. The veterinarian should be familiar with veal calves and the production practices on each client's premises. The veterinarian should make recommendations for the health program and be responsible for the prescribed treatment regimen. I applaud the American Veal Association for making the veterinarian-client-patient relationship the cornerstone of its Quality Assurance Program.

Managers must be taught the clinical signs which show that calves are not healthy. Calves must be watched carefully for signs of enteric disease and respiratory distress, which are the primary killers of calves.

I recommend that all calves receive a daily diet which is nutritionally adequate to maintain health. The National Research Council (NRC) has established minimum nutritional requirements for dairy replacement heifers. Although veal calves are raised for a very different purpose than dairy replacement heifers, I still believe that the liquid diet should meet the NRC minimum standards. The form that the diet takes, whether it is liquid or solid, is not the crucial issue, in my opinion. It is the bioavailability of the essential nutrients in the calf's diet that really counts. Fresh clean water should be easily accessible to calves.

The amount of iron fed to veal calves is a topic that generates lively discussion. Most animals are fed preparations which have sufficient iron for normal growth and development. It is necessary that the hemoglobin levels lie within the normal range to insure satisfactory weight gain and maximum production. The iron levels of calves should be monitored by hemoglobin determination on a regular basis to ensure that the animals are getting the right amount of nutrients to protect them from anemia.

Iron contributes to the formation of two oxygen-carrying proteins in the calf's body: hemoglobin, which carries oxygen in the bloodstream, and myoglobin, which carries oxygen in muscle tissue. Once the calf receives enough iron in its diet to maintain hemoglobin levels within the normal range, excess iron goes toward myoglobin production. It is the myoglobin in the muscle that produces the less desirable red tissue color in veal.

Veal growers choose to restrict the calves' access to forage because almost all hays promote myoglobin formation in the muscle tissue, which significantly reduces the price that the grower receives for the veal.

From a health perspective, I am at least as concerned about the presence of selenium and other trace minerals in a calf's diet, particularly those minerals which influence the animal's ability to fight disease. The relative amounts of micronutrients such as copper and molybdenum influence the bioavailability of iron in the diet, and thereby contribute to whether or not the animal is anemic. The challenge therefore lies in constructing a diet that meets the calves' nutritional and health needs without affecting the marketability of the carcass.

Another nutritional concern links feeding with housing. Calves must be housed so that each calf gets enough to eat. When calves are fed in groups, there must be sufficient trough space or feeding points to avoid undue competition for food. If calves vary greatly in size, it is a simple fact of life that the larger, more aggressive calves will get more than their share, while the smaller calves may not receive enough to eat. Numerous studies document a much higher morbidity and mortality rate due to diseases associated with group rearing.

To facilitate feeding, to limit the spread of disease and to control vices, such as naval sucking, housed calves are preferably kept in individual pens or in small groups. The space allowance for calves housed in groups should be calculated in relation to the whole environment, the age of the stock, and the size of the group, and should be based on appropriate professional advice. Facilities should be constructed such that animals can stretch, stand and lie down comfortably. Calves may or may not be allowed to turn around, depending on management practices, housing and health.

Housing should facilitate the veal grower's ability to observe his or her calves in order to be able to detect disease at an early stage. Facilities should be designed so that segregation of sick or injured animals is possible. Keeping the housing clean is an important component of good veal calf management and may be indicate of the producer's overall commitment to high quality management.

Specific and particular attention should be paid to maintaining high air quality within the production unit. Veal growers should use expert advice to ensure that correct ventilation, temperature and humidity are provided and take great care that these conditions are maintained.

Throughout the daylight hours, the level of indoor lighting, natural or artificial, should be such that all calves can be seen clearly. In addition, adequate lighting should be available for satisfactory inspection at any time. Contrary to information circulated to the general public, it is recommended that calves be raised in well lighted areas.

Although AVMA supports the intentions behind the Veal Calf Protection Act, namely to improve the welfare of veal calves, the association, and myself personally, must strenuously object to the legislation on strictly pragmatic grounds. First and foremost, we reject the underlying assumption that current veal calf production practices are unsatisfactory.

Confinement rearing may benefit the calves and assist producers in delivering a high-quality, wholesome food product to the market. Animals, housed in clean well ventilated buildings, and fed properly are provided with excellent living conditions. Good preventive medicine procedures can be implemented. Observation of each animal several times a day is desirable and easist when calves are housed individually. Calf losses due to disease are minimal and complete parasite control is possible.

Veterinarians are trained to base their assessments of animal welfare on objective, scientific grounds. Unfortunately, the Veal Calf Protection Act may not improve animal welfare and may indeed place the calves at risk. HR 84 dictates certain management practices; however, in its attempt to focus on limited factors which affect the well-being of calves, the bill neglects basic mechanisms of disease transmission. For example, the social contact that may be required by the legislation directly contradicts my direct experience as a practitioner.

The Veal Calf Protection Act also removes the producer's ability to be flexible in overcoming management challenges with creative solutions. Indeed, no aspect of production agriculture in the United States is static, as reflected by the fact that an ever fewer number of farmers feed an increasing population for so little money. To unnecessarily restrict husbandry methods runs directly contrary to innovation which is the hallmark of American agriculture.

I mentioned in my introduction that I care for cattle that are raised for many different purposes. Sometimes a single animal will be targeted for several purposes throughout the course of its life. For example, cull dairy cows may be slaughtered for beef, or a calf originally intended for the fancy veal market may wind up being fed out as a steer. As a producer evaluates his or her management practices, it is essential to keep in mind the purposes for which the cattle are being raised. Purposes may change throughout the course of the animal's life.

In the nutrition area, I hope that I have been able to convey some sense of the complexity of biochemical cycles within the bovine. Again, the legislation is somewhat misguided in its approach. In my opinion, it would be far more beneficial for legislation to mandate that producers provide adequate high quality colostrum at birth rather than to specify that animals be fed solid food. Colostrum is far more important to preserve calf health, and the scientific base exists to back up that assertion.

Overall, the bill removes the producer's ability to employ innovative designs and problem solving. Its approach collides head on with my with personal direct experience with livestock industry in general and calf rearing in particular. Some of its precepts may prove fundamentally contrary to the successful rearing of healthy veal calves, given the present state of knowledge.

As I stated before, and it bears repeating now, veterinary medicine is emphatically in favor of improving animal welfare and will contribute its talents wherever it can. We feel improvements can best be accomplished by educated, sensitive producers who truly care about their animals. We support the AVA's development of a quality assurance program and believe that the voluntary programs like this one may be the best way of improving food animal welfare. I don't believe that federal legislation is the best approach to dealing with food animal management issues. I don't believe that HR 84 will benefit the calves.

Thank you for this opportunity, Mr. Chairman. I will be pleased to answer any questions you may have.

(Attachment follows:)

AMERICAN VETERINARY MEDICAL ASSOCIATION
GOVERNMENTAL RELATIONS DIVISION • SUITE 300
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AMERICAN VETERINARY MEDICAL ASSOCIATION

GUIDE FOR VEAL CALF CARE AND PRODUCTION

(revised April, 1989)

Introduction: Many male dairy calves were killed at birth until the veal industry was established. The value of this by-product of the dairy industry has increased tremendously in recent years with the expansion of the special fed veal segment.

Approximately 40 percent of the dairy bull calves now produced are used for veal consumption.

Use of dried skim milk products has increased tremendously in order to satisfy the feeding requirements and to satisfy the market generated by veal production.

A. Housing, Pens, and Equipment

1. Internal surfaces of housing and pens for calves should be of materials which can be effectively cleansed and disinfected, or which are disposable.
2. In order to avoid injury to cattle, internal surfaces and fittings of buildings and pens accessible to them should not have sharp edges or projections, and fittings within pens should be arranged accordingly.
3. All floors, particularly slatted ones, should be designed, constructed, maintained and adequately drained, so as to avoid injury or distress to the calves. Professional advice should be sought if injury or distress occurs.
4. Paints and wood preservatives which may be toxic to calves should not be used on surfaces accessible to them. Particular care is necessary to guard against the risk of lead poisoning from paint in any part of the building or when secondhand building materials are used.
5. Provision should be made for the segregation of sick or injured animals.
6. When planning new building, consideration should be given to the provision of an escape route for stock in an emergency and materials used in construction should have sufficient fire resistance to enable any emergency procedure to be followed. Effective ventilation and the avoidance of draughts are essential. Expert advice amy be necessary to ensure correct ventilation, temperature and humidity for the type of housing used. For housed calves it is essential to avoid conditions which could produce chilling, particularly for those up to four weeks of age.

7. When removing slurry from under slats, special care is essential to avoid fouling the air with dangerous gases which may be detrimental to man and animals.

8. Animals should be able to stretch, stand, and lie down comfortably. Calves may or may not be allowed to turn around, depending on management, housing and health.

9. It is recommended that veal calved kept in total confinement be kept on oak slatted floors. These floors are recommended because of the ease of the animal getting up and down, while also providing constant fresh air circulation in completely ventilated buildings. Sufficient research has been done to indicate that slatted floors do not cause or promote lameness. Workers have shown that the floors provide better traction. Fecal material can be washed daily through the slatted floors and there is little or no opportunity for the accumulation of fecal material that might provide incubation for pathogenic organisms.

10. Throughout the hours of daylight the level of indoor lighting, natural or artificial, should be such that all housed cattle can be seen clearly. In addition, adequate lighting should be available for satisfactory inspection at any time. Contrary to information circulated to the general public, it is recommended that calves be raised in well lighted areas. Adequate lighting and ventilation is recommended.

11. Essential mechanical equipment, such as feeding hoppers, waterers, milk dispensing machines, ventilator fans, heating, and lighting units, fire extinguishers and alarm systems, should be inspected regularly and kept in good working order. All electrical installations should be inaccessible to cattle and properly grounded.

12. The space allowance for calves housed in groups should be calculated in relation to the whole environment, the age of the stock, and the size of the group, and should be based on appropriate advice.

B. Feeding System

1. Whatever feeding system is adopted, all calves should receive a daily diet which is nutritionally adequate to maintain health. It is vital that every calf received colostrum as soon as possible after it is born, certainly within the first six hours of its life, and continued for three days. Thereafter, the calf should receive suitable food at regular intervals. When calves are fed in groups, and especially if feeding is restricted, there should be sufficient trough space or feeding points to avoid undue competition for food. After calves are weaned, fresh clean water should be easily accessible to them at least twice daily.

2. To facilitate feeding, and to limit the spread of disease or vices, such as naval sucking, housed calves should be kept either in individual pens or in small groups.

3. Utensils used for feeding liquids should be thoroughly cleansed immediately after each use and disinfected daily by heat or with a dairy disinfectant approved under the Milk and Dairies Regulations, available from DHIA (Dairy Herd Improvement Association).

C. Disease Surveillance

1. The basis of a sound health program for a veal calf production unit is to establish a regular veterinarian-client-patient relationship. The veterinarian should be familiar with the veal calves and the production practices on each client's premises. The veterinarian

should make recommendations for the health program and be responsible for the prescribed treatment regimen.

2. Managers must be taught to know the clinical signs which show that calves are not healthy. These signs include listlessness, loss of appetite, discharge from the nostrils or eyes, excessive salivation, persistent coughing, swollen joints, lameness, and scouring. In particular, calves should be watched carefully for signs of scouring and respiratory distress.

D. Iron Level Monitoring

1. Most animal feeds now prepared do have sufficient iron to maintain the normal amounts needed. It is necessary that the hemoglobin levels are normal or above to insure satisfactory weight gain and maximum production. The iron levels of calves should be monitored by hemoglobin determination on a regular basis in order to determine that animals are getting the right amount of nutrients to protect them from anemia. History of whether or not the animals come from iron-deficient areas, as well as anemic dams is beneficial.

2. Free choice or twice daily feedings are satisfactory. It has been well documented in veal production operations that bucket feeding does not lead to digestive problems.

E. Confinement Rearing of Veal Calves has some Unique Advantages:

1. The animals, if housed and fed properly, in well ventilated buildings, with proper clean up procedures, are provided with excellent living conditions.
2. Good preventive medicine procedures can be implemented.
3. Observation of each animal on a daily basis is possible.
4. Calf losses due to disease are minimal.
5. Complete parasite control is possible.
6. It enables the industry to avail itself of one more phase of animal production.

SUMMARY STATEMENT: ADAPTATION OF LIVESTOCK AND POULTRY TO CONFINEMENT

It is AVMA's position that swine, veal calves, broilers, and laying hens are adaptive, as evidenced by the performance and health achieved by confinement rearing. Confinement provides many opportunities to enhance the health and welfare of food animals, such as:

A. protection from adverse environmental conditions;

B. protection from predators;

C. provision of optimal nutritional requirements in quantity and quality;

D. provision of adequate, high quality water supply;

E. reduction of aggression;

F. enhanced capacity for observation and access when requiring care or handling;

G. greater control over health.

Good livestock and poultry producers are increasingly attentive to the welfare of the animals in their care. The vast majority combine scientific, moral, ethical, philosophical, and economic values, attitudes, and concerns. Their success depends heavily on the welfare of the animals under their stewardship. Most are professionals and well-educated in their field. Being specialists, they are even more in tune to what is required for the welfare of their charges than were their counterparts of the past. The trend toward professionalism in all aspects of livestock and poultry production, including a sensitivity to animal welfare, will continue.

American Veterinary Medical Association's Position on animal welfare

Background: These issues clearly delineate the tension between animal welfare concerns and the economics of practical cattle management in many settings. In other situations anesthesia is acceptable and even expected by veterinarians and livestock owners. No one doubts that calves feel pain when castrated or dehorned.

12. Title: Veal Calf Welfare and Production Guidelines

Recommendation: AVMA recognizes that veal calf production is well established, can be humane and improve the welfare of calves. Veterinarians and veal producers are encouraged to cooperate to explore alternative housing systems, and apply and refine the principles set forward in the AVMA Guide for Veal Calf Care and Production (pages 39-42).

Problem Statement: Veal calf production has been characterized by some humane advocates as the least defensible food animal production practice. The reasons given are several.

1. Many veal calves are raised in wooden crates and on slatted floors under strict confinement that prevents them from turning around and interacting with other calves.

2. An iron-deficient diet has been associated with the desirable pale color of premium quality veal. The normal diet of suckling calves is low in iron. Dried skim milk products can have iron added, but it is alleged that this is not the standard practice.

3. The lack of roughage in the diet has been associated with hair balls and behavioral problems. Calves could be fed hay or straw, but a total milk, liquid diet is easier to manage.

4. Prolonged artificial darkness has been associated with veal calf raising in the northeast. It is not an acceptable management practice in the industry.

5. Lameness problems due to slotted floors have been reported by some and refuted by others.

6. Overuse and abuse of antibiotics are problems.

7. Photographs and stories of veal calves in narrow crates have often been used to dramatize the alleged "Factory Farming" abuses of confinement and the cruelty of food animal farmers.

AVMA Guide for Veal Calf Care and Production

Introduction: Many male dairy calves were killed at birth until the veal industry was established. The value of this by-product of the dairy industry has increased tremendously in recent years with the expansion of the special fed veal segment.

Approximately 40% of the dairy bull calves now produced are used for veal consumption.

Use of dried skim milk products has increased tremendously in order to satisfy the feeding requirements and to satisfy the market generated by veal production.

A. Housing, Pens, and Equipment

1. Internal surfaces of housing and pens for calves should be of materials which can be effectively cleansed and disinfected, or which are disposable.

2. In order to avoid injury to cattle, internal surfaces and fittings of buildings and pens accessible to them should not have sharp edges or projections, and fittings within pens should be arranged accordingly.

3. All floors, particularly slatted ones, should be designed, constructed, maintained and adequately drained, so as to avoid injury or distress to the calves. Professional advice should be sought if injury or distress occurs.

4. Paints and wood preservatives which may be toxic to calves should not be used on surfaces accessible to them. Particular care is necessary to guard against the risk of lead poisoning from paint in any part of the building or when secondhand building materials are used.

5. Provision should be made for the segregation of sick or injured animals.

6. When planning new buildings, consideration should be given to the provision of an escape route for stock in an emergency and materials used in construction should have sufficient fire resistance to enable any emergency procedure to be followed. Effective ventilation and the avoidance of draughts are

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June 1, 1989

Mr. Charles Stenholm
U.S. House of Representatives
Committee on Agriculture
Subcommittee on Livestock, Dairy & Poultry
Room 1301 Longworth House Office Building
Washington, D. C. 20515

Dear Mr. Stenholm:

America has always been against cruelty to animals. America started as primarily an agrarian society where animals were a major part of the survival of the families. Man gave life and sustenance to the animals. The animals gave it back to him. The farmer's livelihood, his survival, depended on the thriving of animals.

Many farmers today depend on animals for their livelihood. Abuse and improper care causes the loss of farm income. Economics is a hard legislator. It has already passed many "laws". One such "law" is that if a farmer does not properly attend to the proper care, feeding, housing and nursing of his livestock, they will not perform as they are asked to and he, the farmer, will be without a livelihood. Laws of economics forbid cruelty to animals. Further laws, regulating farmers are not necessary.

Veal growers are no different from any other farmer. They have invested their livelihood in the raising of small calves. They often choose to do this in a manner that is poorly understood by the general public.

The male dairy calf once was an unwanted commodity. He was not as valuable as his sisters who later produce milk. His value as meat was not as great as his beef breed cousins. He was somewhat of a waste.

The by-products of the cheese industry were once a waste as well. Whey and other milk products were hard to process for human consumption. Some of these substances were polluting land and streams. The development of veal farming gave use to the unwanted calves and the unwanted food stuffs.

Techniques were developed to formulate the milk products, such as whey into a diet that was very near cow's milk in consistency. These diets have now been fortified and balanced for the optimal health and growth of the male dairy calf.

Small calves do not withstand harsh swings of temperature. Climate controlled barns have been built to give warmth in winter and cooling in the summer. Snow and rain, mud and dust are not problems to veal calves as they are to their range-raised beef cousins.

Groups of animals, whether humans or calves, establish social hierarchies. There are the strong and the weak. By individually penning calves, the weak now have protection from the aggressive. Individual stalls allow the farmers a chance to give individual attention to weaker, slower calves. Disease control is much easier when movement around the barn is restricted.

Veal farmers have wisely chosen the help of animal scientists and veterinarians to prevent housing stress, nutritional deficiencies and infectious diseases. Veal farmers produce a lot of meat from a little feed. Animals that are stressed or anemic or diseased or abused can not do this. Anemia will stunt the growth of a calf. Calves raised for veal grow rapidly because environmental stresses have been eliminated, because diets are well-balanced and highly palatable, because disease control is practiced, because competition and aggression of the other calves are eliminated and because there is the constant attending care given by the veal farmer. Mankind should have it so good.

There have been numerous attempts to improve on the veal rearing system. Several years ago several farmers attempted to raise calves in larger pens with 15-25 calves per pen. This resulted in higher sickness and death rates. The calves at market were very uneven in size demonstrating the socialization problems from dominant calves intimidating the less aggressive calves.

Recently dairy bulls have been raised with the intent that these animals would be started on veal farms and eventually moved to feedlots. Grain and hay are part of the program, and iron supplements are give. Death rates and sickness rates have not been improved upon. Rate of gain has been very slow. Sometimes these calves need to be fed and handled more like veal calves to avoid starvation and illness. They are raised more like veal calves to reduce stress.

The American farmer was and still is the most informed and dedicated humanitarian. Because his livelihood is closely linked to the well-being of his livestock, he cannot afford to be cruel to his animals. Many times his own comfort and well-being are sacrificed for the sake of those animals under his care. Veal farmers are farmers. The vast majority of veal is still raised on family farms.

The livestock producer is the one who can best evaluate the comfort of his own livestock. Someone unfamiliar to the farm is a poor evaluator. Someone living far removed from the farm should have no right to force their well-intentioned views upon the farmer.

There is no need for legislation such as proposed by Representative Bennett in HR 84. It jeopardizes the health and comfort of veal calves, which in turn threatens the livelihood of livestock producers in America. Please stop the progress of this bill. Put it humanely to rest.

Jan C. Gawthrop, D.V.M.

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June 6, 1989

Dr. Clyde K. Smith D.V.M. Ph. D.
Professor Emeritus, The Ohio State University
Department of Veterinary Preventive Medicine
Food Animal Health Research Program

Chairman: Veal Health Committee of the American Veal Association

I have worked directly with veal farmers in Ohio in regard to their veal health programs during a nine year period from 1978 - 1987. Since retiring from The Ohio State University and moving to Wisconsin I have continued to remain active with the Veal Health Committee of the American Veal Association.

I am opposed to H.R. 84 "The Veal Calf Protection Act" for the following reasons:

1. This proposed legislation is ill-advised and unneeded legislation.
2. The premise of the legislation has been developed from information that does not accurately represent the veal farms of today's agriculture.
3. This proposed legislation will impact negatively on all areas of the raising of calves in each segment of agriculture.
4. It will be excessively expensive for the veal farmers to implement these requirements and they will not derive an economic return.
5. This legislation will not improve the health status of the calf and it may impact negatively on the health program for the veal calf.

There is adequate legislation already enacted at the Federal and State levels to deal with cruelty to animals. If animals are treated in an inhumane manner the existing laws can be invoked and the offending persons brought to justice. These laws are currently being used at the Federal, State and local levels to prosecute individuals that commit acts of cruelty to animals.

This legislation is based on the premise that veal calves are confined in a manner that "produces physical restrictions resulting in behavior deprivation and impaired health". This is not true based on the fact that the calves that have been sold by the dairy farmer and shipped to the veal farmer frequently have a lower mortality rate than the heifer calves that are retained on the dairy farm. This premise is also not true because these veal calves have the opportunity for visual and physical interaction with other calves. These veal calves have adequate space to make normal postural adjustments, move forward and backward and to move in a lateral direction. Veal calves can groom themselves and interact with adjacent calves.

It is stated that "frequent practice of feeding a diet deficient in solid food and iron to produce formula-fed veal causes the calves to become anemic and suffer digestive and other health problems". Current published research has shown that the amount of iron in veal milk-formulas is adequate for growth, normal behavior and normal health. Veal farmers frequently supplement the milk to exceed the amount of iron in the milk-formula to ensure that the calf will not become anemic. The first clinical sign of anemia in a calf is the refusal to eat. The refusal to eat would impact directly upon the rate of growth of the calf and subsequently upon the economic return to the veal farmer. The normal range for the hemoglobin value of the bovine is 14.5 - 8.0 gms per 100 ml of blood. The veal farmer plans to keep the hemoglobin levels within this normal range throughout the growing period.

The frequent statement that the diet deficient in solid food will produce digestive disturbances and other health problems is not true. Digestive disturbances in the calf are normally associated with feeding an excess amount of milk, improper formulation of the diet, or bacterial infections. The veal calf is carefully fed in regard to the amount and type of milk-formula that it receives. The milk consumption of the calf is noted at each morning and evening feeding and it is adjusted for the individual calf. The milk-formula is increased in small increments to prevent the type of increase that would induce a digestive disturbance. The amounts of solids in the milk is carefully formulated and fed at rates based on research that has been conducted at Universities and private research laboratories. The statements that hairballs in the digestive tract are a result of the type of diet is not true. Adult cows and calves that are fed rations that contain hay and grain develop hair balls in the rumen or paunch. Usually these are of little consequence but occasionally they move toward the lower digestive track to create a blockage. These hairballs can be diagnosed clinically and removed surgically. Several other species of animals also develop hairballs. Cats and rabbits have been commonly afflicted with hairballs in the intestinal tract. It appears to be a condition associated with self-grooming rather than a particular type of diet.

The individual pen which has as "the smallest dimension - - - - the length of the calf, measured from the tip of the nose to the base of the tail, plus six inches, or (B) which prevents the calf from having an appropriate amount of physical contact with other members of the same species - -" may be detrimental to the preventive health program of the calf.

1. A calf that is not confined to some degree is much more difficult vaccinate, to administer nutritional supplements by injection, to administer health program treatments. This would impact the preventive medicine program for the calf in such a way that, if it cannot be done without increased difficulty, it will not be done.
2. "An appropriate amount of physical contact" as stated in this legislation may be more than an appropriate amount of physical contact for the calf. All calves have a tendency, if allowed, to suck themselves or other calves. This leads to navel or scrotal sucking and urine drinking. Calves that have unlimited access to feces and urine will recycle the excreted medications and the control and withdrawal times will be impossible to establish. The swine industry has been working for ten years to extricate themselves from a problem of recycling of sulfamethazine in feeder pigs. The veal farmers should not be forced into that type of situation and then again be forced into extricating themselves from it.

It is common knowledge and it is substaniated by research that a single larger pen does not prevent disease and that young calves housed in larger group pens have incidences of transmissible diseases that increase from 2 to 14 times over that of the disease incidence of the individually penned and tethered calf.

This legislation would not prevent disease in the veal calf and it would serve to negativily impact the calf it seeks to protect, by making every form of a preventive medical program and health program more difficult administer.

The American Veal Association through the Veal Health Committee has developed a Veal Quality Asssurance Plan (A copy of this program is appended). The objective of this program is as follows: "to ensure that all calves shipped from this farm are healthy, wholesome and meet Food and Drug Administration, United States Department of Agriculture and the Environmental Protection Agency specifications".

This Quality Assurance Program has three (3) main areas:

1. Animal husbandry standards and feeding practices.
2. The veterinarian-client-patient relationship that is needed in using feed medications, individual treatments, establishing withdrawal times and to test individual animals for medications.
3. Certification -
   a. Certification by the farmer that he has followed the Quality Assurance Program.
   b. Certification by the veterinarian that a veterinarian-client-patient relationship exists and that he is responsible with the farmer for the health program of the calves.

I feel strongly that as this Quality Assurance Program is adopted it will lead to:

1. an enhanced awareness of husbandry and health programs of veal calves.
2. create a long term opportunity to build a program of consumer confidence regarding the safety and wholesomeness of veal.
3. reduce the need for new and burdensome legislation and regulations that may be imposed by Federal Agencies.

(Attachments follow:)

AMERICAN VEAL ASSOCIATION
VEAL QUALITY ASSURANCE PROGRAM

Objective: To ensure that all calves shipped from this farm are healthy, wholesome and meet Food and Drug Administration (FDA), United States Department of Agriculture (USDA) and Environmental Protection Agency (EPA) specifications. This program is a cooperative effort between the farmer and government agencies and is monitored by periodic sampling of carcasses at packing plants by The Food Safety Inspection Services (FSIS).

Procedures

1. Veal Calf Husbandry.

1.1 The veal calves will be raised using husbandry practices that are equivalent to, or exceed the standards of the American Veal Association Guide for the Care and Production of Veal Calves.

1.2 The veal farmer will be responsible for the welfare of the calves. Every person that works in the veal barn will be trained to maintain the health and well being of the calves.

2. Feed Sources.

2.1 Feed distributors or feed manufacturers will maintain a quality control program for each lot of feed sold to a veal farmer.

2.2 The veal farmer that formulates veal feed on the farm will maintain an inventory record and quality control samples until 90 days after the calves are sold for slaughter.

2.3 The veal farmer will maintain an inventory record of all additives that are mixed with the veal formula.

2.4 The drinking water and the water used for the formula mixture should be suitable for human consumption and be tested on an annual basis to assure that it is free from contamination of substances that may cause harmful food residues.

3. Feed Medications.

3.1 The veal farmer assures that all feed additives are used under the guidelines of an established veterinarian-client-patient relationship.

3.2 Through a veterinarian-client-patient relationship the veal farmer assures that all additives are withdrawn in compliance with current practices in a manner to avoid violative residues.

4. Individual Treatments.

4.1 Health programs of individual animals in the veal barn have followed treatment schedules as developed by a licensed veterinarian in a veterinarian-client-patient relationship with the veal grower. Health programs of each individual animal have been recorded by the farmer showing the animal number. The record must include the date that the medication is administered as well as the medication, route of administration and the amount of the dose.

4.2 The treatment regime of all animals scheduled for slaughter will be reviewed under the supervision of a qualified veterinarian to assure that all animals to be slaughtered have met withdrawal times recommended by the FDA to prevent violative residues.

4.3 Veal farmers and the veterinarian will use an appropriate test to randomly test four percent (4%), but not more than ten (10) live animals that have received medications or extra-label drugs prescribed by a licensed veterinarian.

4.4 FSIS will randomly sample carcasses at the packing plant using the STOP test or other in-plant tests to check for potential residues.

5. Pesticides.

5.1 The veal farmer assures that only EPA-approved pesticides have been used in compliance with label directions.

6. Maintenance of Records.

6.1 All records of formula fed, feed additives added to milk formula and individual treatments are maintained by the veal farmer for a period of 90 days after slaughter.

6.2 Should unacceptable levels of residues be found in any of the calves submitted for slaughter by the veal farmer, the applicable records are to be made available to FDA personnel to aid in determining the source and cause of the residue. Corrective practices to eliminate residue must be instituted as soon as possible.

7. Action in Case of Potential or Actual Violation.

7.1 Any unacceptable residues found by FSIS will be reported by telephone to the veal farmer.

7.2 When an unacceptable residue is found, a joint assessment of source and cause will be made and corrective action taken. This joint assessment will include the veal farmer, veterinarian, FDA and the FSIS.

AMERICAN VEAL ASSOCIATION QUALITY ASSURANCE PROGRAM

Veal Growers Statement

I wish to participate in the American Veal Association Quality Assurance Program to produce and market veal calves that are healthy and free of violative residues.

Name (Owner) ____________________ Manager ____________________
Address ____________________ ____________________
____________________ ____________________
Phone ____________________ ____________________

Veal Farmer Number ____________________

Farm Address (if different) ____________________
____
Phone ____________________

Type of Operation: Individual Pen ________ Group Pen ________
No. of Calves ________ No. of Calves ________

Milk Formula: Brand/Source ____________________
Farm Mixed ____________________
Special Supplements ____________________
____
____

Veterinarian: Name ____________________
Address ____________________
____
Phone ____________________

Calf Group Identification No. ____________ No. of Calves ________
Date Purchased ____________________
Date Scheduled for Slaughter ____________________
Packing Plant ____________________

I certify that these calves have been raised using the guidelines of the American Veal Association Veal Quality Assurance Program.

____________________ ____________________
Owner/Manager Date

AMERICAN VEAL ASSOCIATION VEAL QUALITY ASSURANCE PROGRAM

Veterinarians Statement

1. I certify that all treatment and feed additive programs for the Calf Group listed below have been reviewed under the guidelines of a appropriate veterinarian-client-patient relationship.

Calf Group Identification No. ____________________

Owner/Manager ____________________

Date Purchased ____________________

Date Scheduled for Slaughter ____________________

Packing Plant ____________________

Address ____________________

2. I certify that only trained personnel preformed the antibiotic residue tests on the veal calves prior to slaughter.

3. I certify that the FSIS and the FDA will be allowed to make periodic inspections of the test records and the facilities where the residue tests are preformed.

Veterinarian ____________	Testing Laboratory ____________
Address ____________	Address ____________
____________	____________
Phone ____________	Phone ____________
Date ____________	Date ____________

HB - Heavy Breather
RN - Runny Nose
L - Loose
S - Sunken Eyes
D - Droopy

Veal Services, Inc.

Wooster, Ohio Phone 216-262-0221

1. Watch
2. Questionable
3. Not Good
4. Bad

Month________________ Date________________

Calf. No.	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
1														
2														
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VEAL SERVICES, INC.
Suggested Veal Calf Accelerated Feeding Schedule
PROFESSIONAL VEAL FORMULAS

Days on Feed	Ozs. Powder	Pounds Total Solution	Accumulative Starter lbs.	Accum. Finisher lbs.	Powder Total lbs.	Product
1	8	6	1.0		1.0	Starter
2	9	6.50	2.125		2.125	Starter
3	10	7	3.375		3.375	Starter
4-6	11	7.50	7.5		7.5	Starter
7	12	8	9.0		9.0	Starter
8-10	13	8.50	13.875		13.875	Starter
11	14	9	15.625		15.625	Starter
12	15	9.50	17.5		17.5	Starter
13-15	17	10.25	23.2375	0.6375	23.875	10%FI/90%ST
16-18	20	11	29.2375	2.1375	31.375	20%FI/80%ST
19-21	23	11.75	35.275	4.725	40.0	30%FI/70%ST
22-28	26	12.25	48.925	13.825	62.75	40%FI/60%ST
29-35	29	13	59.075	29.05	88.125	60%FI/40%ST
36-42	32	13.75	66.075	50.05	116.125	75%FI/25%ST
43-49	36	14.75	69.225	78.4	147.625	90%FI/10%ST
50-56	40	15.50		113.4	182.625	100%FI
57-63	43	16		151.025	220.25	Finisher
64-70	46	16.50		191.275	260.5	Finisher
71-77	48	16.75		233.275	302.5	Finisher
78-84	50	17.25		277.025	346.25	Finisher
85-91	51	17.50		321.65	390.875	Finisher
92-98	52	17.75		367.15	436.375	Finisher
99-105	53	18		413.525	482.75	Finisher

The above schedule is a guide Per Calf. Individual calves will vary in their desire and capacity to consume formula and should be fed accordingly*. The amounts shown are Per Feeding and should be fed Twice Daily. This schedule is designed to utilize 16/18 Finisher.
*Adjust Feeding according to texture of manure.

041985

54	18.25
55	18.50
56	18.75

The Nutrition of the Veal Calf

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Ithaca, NY

This paper is designed to make four salient points:

1. That the special-fed veal calf is an example of optimally fed domestic livestock.

2. That the practice of providing limited amounts of dietary iron coupled with careful monitoring of the calf's hemoglobin level produces a healthy, rapidly growing calf that meets the discriminating market requirement for a pink carcass.

3. That there is no scientific justification for insisting that a special-fed veal calf "needs" solid food in addition to liberal amounts of a nutritionally balanced milk replacer.

4. That there is scientific justification for the use of prophylactic levels of antibiotics in the feed during the early weeks of the life of a special-fed veal calf.

No. 1. The Veal calf is well-fed

All mammals and birds require about 40 nutrients at the cellular level for proper maintenance, growth and function. The simple-stomached animal such as cat, dog, human and the pre-ruminant, special-fed veal calf require each of those nutrients in the diet. It is possible to formulate a milk replacer for the veal calf, which contains all 40 of these nutrients in proper levels, utilizing modern nutritional knowledge[1,2] and modern feed manufacturing technology. The milk replacer powder when reconstituted with water provides all the nutrition required by the calf for maximal growth. Table 1 lists the nutrients which feed manufacturers monitor in their milk replacers.

What is maximal growth? Table 2 has been constructed from the National Research Council publication on the Nutrient Requirements of Dairy Cattle (USA)[1] and delineates what is expected from a veal calf fed solely on milk or milk replacer at various stages of growth. The Agricultural Research Council (UK)[2] lists tables of requirements for rates of gain from maintenance (0 gain per day to 1.5 Kg (3.3 lb)/day) for calves. In short if a veal calf can grow over the 16 week period at a rate of 2 to 2.5 lb/day it is doing as well as can be expected based on its genetic capability.

How well do veal calves do? Veal farmers purchase male Holstein calves at about 100 lbs of live weight, feed them for about 16 weeks (112 days) and market them at about 350 lb live weight. This represents an average daily gain of about 2.2 lb/day [(350-100) ÷ 112 = 2.2].

The results of a recent Cornell experiment are summarized in Table 3[3]. A total of 10 calves were fed a control milk-replacer. The average daily gain reached a maximum of 3.1 lb/day during the last two weeks, with an overall gain of 2.3 lb/day. The calves were housed in conventional stalls and fed only milk replacer twice a day. Feed efficiency was 1.6 which is excellent. In another

Cornell study[4] calves gained 2.2 lb/day over a 14.5 week period. In a recent Illinois experiment[5] gain was estimated (RGW) to be 2.2 lb/day, and in a study at Ohio State[6] the gain was 2.5 lb/day.

In summary, special-fed veal calves fed modern milk replacers and managed effectively, grow maximally. When such performance is coupled with a mortality of less than 5% on well managed farms, it is evident that veal production has reached a high degree of excellence.

No. 2. Dietary iron and special-fed veal production

Iron is a dietary essential for all mammals and birds. It is an integral part of hemoglobin, a pigment in the red blood cells needed to carry oxygen from the lungs to the cells. Muscle possesses a similar iron-containing pigment, myoglobin, which serves a similar function in the muscle.

At birth, the calf may have a variable level of hemoglobin from 7 gm/dl to over 12 gm/dl. Whole milk is notoriously low in both iron and copper and if the calf is fed solely on it's mother's milk and not supplemented with iron, its hemoglobin level will decline dramatically during the next eight weeks[7]. If significant supplements of iron are given (as a dietary supplement, intramuscular injection or access to an iron-containing feed) the blood hemoglobin level will not decrease and, further, muscle myoglobin will increase. Thus a calf getting substantial iron will have a hemoglobin level of over 10 gm/dl and a veal carcass that is high in myoglobin or red.

The market place is a discriminating one and the city chefs and ethnic population demand a pink carcass, in which the flesh is low in myoglobin. Payment is substantially less for a red carcass; so much so that it is not profitable to produce red carcasses.

The veal farmer is thus faced with the need to produce a healthy, rapidly growing (and hence profitable) calf with a light pink flesh.

Outright anemia (very low hemoglobin levels) results in reduced appetite and poor growth[8], conditions which an enterprising veal farmer cannot tolerate economically. Hence he (she) wants a calf with a healthy level of blood hemoglobin and yet not enough dietary iron to produce a red carcass.

Is this feat possible? The answer is an unequivocal yes! Scientists at the University of Illinois[5] compared three levels of dietary iron LI = 5ppm, HI = 105 ppm and a HI-LI = 140 ppm for 18 days followed by 5 ppm to slaughter. The HI-LI system is similar to that often used commercially.

Table 4 summarizes the results. The low-iron group (5 ppm) clearly had the lowest blood hemoglobin concentration. In spite of this low hemoglobin level, bodyweight gains, behavioral patterns and medical treatments were similar to the other treatments. The high-iron group (105 ppm) produced an unacceptable, red carcass.

In a British study[9], dietary levels of 25 to 30 ppm iron provided sufficient iron for normal "appetite, growth and oxygen transport". Increasing the level to 100 ppm produced a dark colored carcass.

In the Cornell study[3,3a] mentioned above hemoglobin was monitored. All carcasses were acceptable. Dietary iron levels of 11 ppm were fed to eight weeks and 31 ppm from 8 to 16 weeks. Blood levels were monitored and calves with low hemoglobin values were supplemented. Table 3 shows the gain by time period·and the concommittant hemoglobin levels. Gains were maximal, carcasses were acceptable and both were produced with hemoglobin levels in the high 7s to low 8s.

In order to provide similar results in the field, iron levels in the diet are controlled and the hemoglobin levels of the calves are monitored. Any calf approaching marginal levels will receive a supplement. Frank anemia is deleterious to the calf, and the farmer _must avoid it_ to maintain a profitable enterprise.

3. _There is no justification for including solid feed in the diet of a special-fed veal calf_.

What is the basis for thinking solid food should be included?

a. To increase the total nutrition of the calf.

A basic nutritional axiom is that animals eat a well balanced diet to satisfy their energy (caloric) requirement. Within limits when an animal is satiated they neither "want" "desire" or "will eat" much more. In my own personal experience, two candy bars effectively squelch the desire for a big buffet; a bowl of navy bean soup, while appetizing before a Thanksgiving dinner pales afterward. The same concept applies to special-fed veal calves.

They are essentially fed all they will eat twice a day. Their caloric needs are met. Figure 1 shows the result of a Cornell Experiment in which Holstein male calves were fed prescribed levels of milk and offered alfalfa hay free choice on the side. They were bedded on sawdust. The top curve 1A plots the level of milk intake against time. It was calculated to mimic the production of a high-producing beef cow which after peaking at 30 pounds began to decline. At the bottom of the figure, Curve 1B shows the alfalfa hay intake the calf "wanted" or in reality ate. Note that when the amount of milk offered began to decline, alfalfa hay intake began to increase. Curves 2A and 2B are for calves offered much less milk. Note that the hay intake is much greater and was consumed earlier. Clearly the calves that were satiated from milk ate little hay, those that were not, ate much more. It seems obvious that if calves are fed optimally they will eat very little dry feed.

b. To provide something to chew on and hence permit the calves to chew their cud.

Special-fed veal calves often go into a cycle of pseudo-rumination. They regurgitate, chew, swallow and regurgitate again. Nothing is ever found in their mouth. Is this frustration or relaxation? Who is to decide? Based on performance there appears to be no stress associated with this activity.

Calves fed *limited* milk or milk-replacer diets will readily eat a palatable, pelleted calf feed, but because the size of the particles in the pellet is so small, they will rarely chew their cud[10]. Are they deprived? I think not.

Studies in Europe[12] suggest that as little as 75 g of straw per day will allow one calf about "four hours of occupation". However, the incidence of abomasal lesions (ulcers) is increased by the feeding of straw[12,13]. Similar results were reported[14] elsewhere and further, the type of roughage was important in the development of ulcers. To date, however, there is no evidence that these lesions affect calf performance[13].

c. To add substantial iron to the diet.

Red carcasses will ensue and under current market conditions such a practice is unacceptable.

No. 4. There is scientific justification for the use of prophylactic levels of antibiotics in veal feed during the early weeks

Antibiotics have been an integral part of early calf feeding since 1950[15]. In 1970 I summarized for an FDA Panel the data on the effectiveness of antibiotics for the young dairy calf between 1955 and 1970 (Table 5). The preponderance of data justified their use. Included in those references were two for veal calves[16,17]. The experiment by Roy et al.[16] reduced the incidence of scours and improved growth. The extensive studies of Vander Wal[17] using over 600 veal calves resulted in a significant improvement in growth (9%), feed conversion (3%) and diarrhea (60%). The positive effect was maintained during the second year. To my knowledge the efficacy of antibiotics for veal calves has not been critically studied in recent years, but I have no doubt that the positive response is still prevalent.

To date the FDA has not resolved the issue of the development of resistant organisms from antibiotic feeding. The fact that no serious problems have evolved in the past 40 years suggests that there is still is no serious threat to human health.

Prophylactic use of antibiotics has been shown to be more effective for the very young calf[15] and clearly that is its value to the veal industry. To insure residue-free carcasses, calves in the later stages of the feeding period should receive no antibiotics.

Conclusion

The bill as stated implies that present nutritional and management practices for rearing veal calves "causes the animals to become anemic and to suffer from digestive and other health problems". I contend that the excellent growth performance and the extremely low mortality (< 5%) of commercially-fed veal calves belies that contention. I feel the bill as written does a disservice to the modern veal production system.

No industry is perfect: I urge this committee to consider the ways they might recommend research to elucidate answers to the issues that remain unresolved.

Table 1. Nutrients in manufactured calf milk replacers which are carefully monitored by the manufacturer.

Lactose, Protein, Fat, Calcium, Phosphorus, Sodium, Potassium, Magnesium, Iron, Cobalt, Copper, Manganese, Zinc, Selenium, Iodine, Thiamine, Riboflavin, Vitamin B6, Vitamin B12, Pantothenic, Acid, Niacin, Folic Acid, Biotin, Choline, Vitamin A, Vitamin D3, Vitamin E, Threonine, Tryptophan, Histidine, Arginine, Lysine, Leucine, Isoleucine, Methionine, Valine, Alanine, Cystine, Vitamin C, Vitamin K.

Table 2. Expected rates of gain and feed efficiencies (Feed intake/live weight gain) of veal calves fed only milk or milk replacer. (Derived from NRC Requirements Table 6-2)[1]

Liveweight Kg	Liveweight lb	Average daily gain (lb)	Feed efficiency (F/G)
40	88	.44	2.25
50	110	.88	1.42
60	132	1.19	1.48
75	165	1.98	1.51
100	220	2.75	1.60
125	275	2.75	1.90
150	330	2.42	2.47

Table 3. Growth and hemoglobin levels of experimental, special-fed veal calves fed at Cornell University[3].

No of	Age (wks)							
Calves	0-4	4-6	6-8	8-10	10-12	12-14	14-16	0-16
	(Av. daily gain -lb)[a]							
10	.14	2.1	2.4	2.9	2.7	2.8	3.1	2.3
	(Hemoglobin level g/dl)							
10	13.2	11.2	9.1	8.2	8.1	8.1	7.7	

[a] Feed efficiency in this experiment was 1.6

Table 4. Summary of responses to three dietary iron treatments of special-fed veal calves[3].

	Low Iron[a]	High Iron- Low Iron[b]	High Iron[c]
No. of calves	5	5	5
16 wk Hb (g/dl)	6.1	7.3	14.2
Final carcass wt (kg)	147.5[d]	155.7	156.9
Lying time (% of total)	79.3	72.8	77.7
Licking-gnawing time (% of time)	8.7	13.4	7.9
Medical Treatments (9-16 wks)			
Calves no/total	2/5	1/5	2/5
Calf days no/total	9/280	6/280	4/280
Carcass quality	Acceptable	Acceptable	Unacceptable

[a] Dietary iron 5 ppm throughout experiment

[b] Dietary iron 140 ppm for 18 da then 5 ppm

[c] Dietary iron 105 ppm throughout experiment

[d] If one poor-doing calf were removed, the average of the remaining four would have been 154.3 kg.

Table 5. Antibiotic responses in dairy calves reported between 1955 and 1970.

Ref.	Calve per group	Antibiotic used	Increase in wt gain %	Sig ?	Reduced Scours?[a]
18	6	CTC[b]	-4.9 to 9.4	NS	No
19	24	CTC	29	*	Yes
	24	Bac. Pen	17	*	Yes
	24	Strep.	17	*	Yes
20	Ca 20	CTC	31-50	**	
21	5	CTC	7-10	NS	
22	16	CTC	8	NS	
23	10	CTC	19	*	
	5	CTC	19	NS	
24	10	CTC	17	*	Yes
	10	Erythromycin	8	NS	Yes
	10	Hygromycin	-10	NS	Yes
	6	CTC	8	NS	
25	7	CTC	31	**	
26	6	CTC	18	**	
27	10	CTC	10	?	
	10	Oleandomycin	10	?	
		CTC & Oleo.[c]	16	?	
28	12	CTC	+	*	Yes
	12	Spiramycin	+	*	Yes
29	24	CTC	20	**	
30	11	CTC	10	NS	
31	6	OTC[d]	7	NS	
	6	Strep	4	NS	
32	8	CTC	7	NS	
	8	Spiramycin	18	NS	
	8	Spiramycin	0	--	
33	30	CTC	18	**	
34	164	CTC	18	**	Yes
35	8	CTC	14	*	
36	32	CTC	23	**	Yes
37	ca 10	CTC	26	*	Yes
	ca 10	Spiramycin	20	*	Yes
38	20	CTC	ca 10	**	No
39	30	CTC	25	**	
	30	CTC	13	**	
	30	CTC	32	**	
40	32	CTC	10	***	

---

[a] A blank in this column indicates that data were not reported or scours was not a problem.

[b] Chlortetracycline

[c] Oleandamycin

[d] Oxytetracycline

*, **, $P < 0.05$; $P < 0.01$ respectively

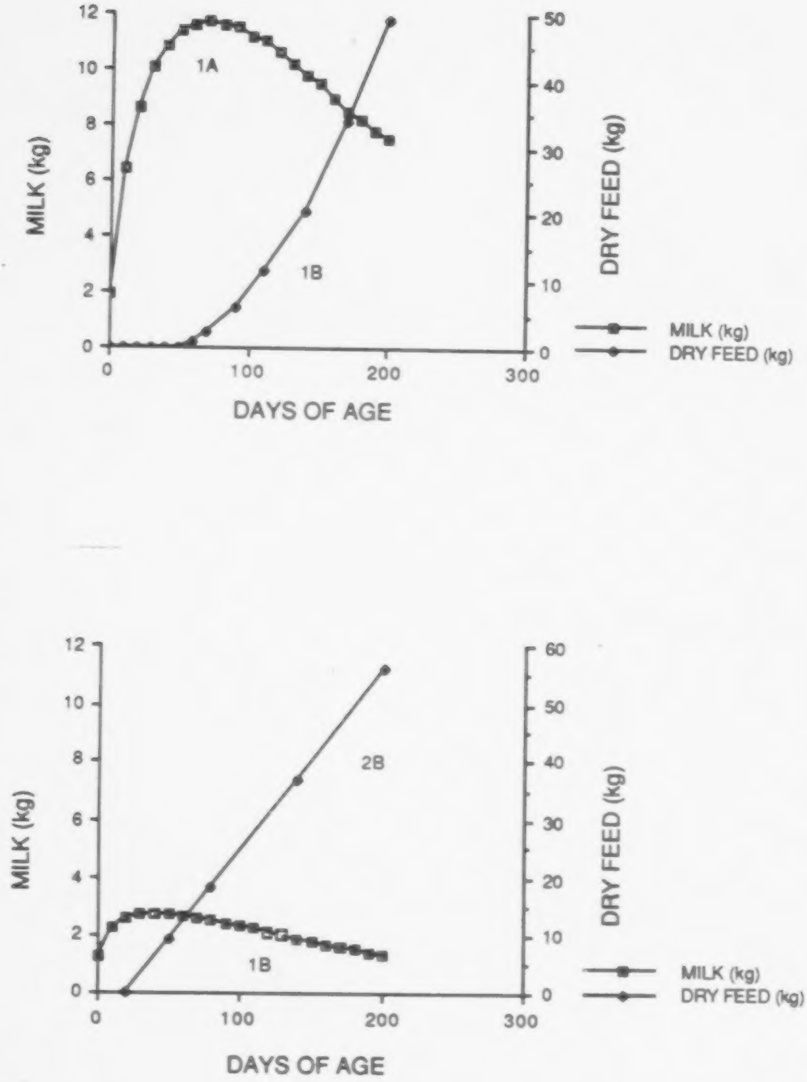

Figure 1. Alfalfa hay intake associated with two levels of milk, fed to Holstein male calves.

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Testimony Prepared For

THE UNITED STATES HOUSE OF REPRESENTATIVES

THE HOUSE AGRICULTURE COMMITTEE

and

THE LIVESTOCK, DAIRY AND POULTRY SUBCOMMITTEE

THE DEPARTMENT OPERATIONS, RESEARCH AND
FOREIGN AGRICULTURE SUBCOMMITTEE

Presented by

Michael W. Fox

Vice President, Bioethics and Farm Animals

The Humane Society of the United States

June 6, 1989

Also on behalf of the American Humane Association and the Massachusetts Society for Prevention of Cruelty to Animals (MSPCA)

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Mr Chairman, I am Michael W. Fox, Vice President of Bioethics and Farm Animals of The Humane Society of the United States (HSUS), the largest animal protection organization in the nation. On behalf of the over 900,000 constituents of The HSUS, many of whom we share with you, I appreciate the opportunity to testify today on H.R. 84, the Veal Calf Protection Act. I hold a degree in veterinary medicine from London's Royal Veterinary College, a Ph.D. in philosophy in medicine, and a D.Sc. in animal behavior from London University. In addition, I have authored books and several technical articles on farm and laboratory animal behavior, husbandry, and welfare. I am a member of the American Veterinary Medical Association and the American Association of Animal Science. As a veterinarian and animal behaviorist, I have a great deal of concern about this issue.

We are grateful to Congressman Charles Bennett (D-FL) for the significant step he has taken to bring the inhumane treatment of veal calves to the attention of his colleagues through the introduction of H.R. 84, the Veal Calf Protection Act. We also wish to thank the Chairman for providing a forum for discussion of this important issue.

Since its founding in 1954, The Humane Society of the United

States has worked to improve the lives of all animals, wild and domestic. Some animal suffering has been halted as a result of public awareness alone. In other cases, inhumane practices continue because the public is not fully aware they exist. We know from experience it is even more difficult to bring about change when economic considerations are involved. But this does not mean suffering should continue, nor make inhumane practices right.

In these situations, legislation is needed. This happened in 1958 and 1978 with the Humane Methods of Slaughter Act. Now legislation is needed to end inhumane treatment of the veal calf.

My testimony addresses health and welfare problems which result from inhumane confinement of veal calves in small crates. In contrast, H.R. 84 successfully addresses those problems by mandating a larger enclosure, appropriate physical contact and a sufficient supply of solid food and iron in order to maintain a veal calf in good health. The HSUS applauds the intent of H.R. 84 and supports Congressman Bennett's bill because it provides the minimum requirements for humane treatment of these calves.

Our purpose here is singular: the humane treatment of an animal. We are not promoting vegetarianism, or trying to put the veal farmer out of business. The HSUS believes inhumane treatment of veal calves is largely the fault of a system which makes unreasonable demands on the farmer, and not the fault of the farmer who produces the animal.

EUROPEAN PRODUCTION PRACTICES MORE HUMANE

While the practice of confining calves in small crates is common in the United States, the United Kingdom and Europe are moving to alternative systems. In the United Kingdom, use of the standard crate has virtually disappeared since a Royal Commission issued the highly acclaimed Brambell Report in 1965. The Commission's study of intensive factory farming concluded that animals should have certain simple, basic "freedoms": to easily and comfortably stand up, stretch, turn around, lie down, and groom."[1] These freedoms are now incorporated in the basic welfare guidelines of farm animal husbandry in the U.K.

In addition, the European Economic Community has passed a resolution to phase out veal crates by 19[illegible]

Meanwhile, in the United States, there are no guidelines or minimal provisions for the humane husbandry of any farm animal, including veal calves. Moreover, farm animals are not protected under the Federal Animal Welfare Act.

PROBLEMS WITH THE CURRENT CRATE IN THE UNITED STATES

The crate system most commonly used in the United States is so confining that the calves cannot turn around or lie down comfortably. This confinement leads to numerous behavioral and health-related problems. For example:

--Calves are subjected to conditions which cause chronic stress, making them more susceptible to disease and increasing the need for antibiotics.

--Calves are prevented from appropriate social contact.

- --Calves cannot express natural behavior, making it more difficult to detect disease early.
- --Calves cannot adopt normal postures to relieve heat stress or sleep.

In short, these normally playful animals are kept practically immobile, are prone to be unhealthy and lead a miserable existence.

Chronic Stress

Chronic stress caused by confinement in current crate systems has long been recognized by veterinarians as a severe problem. The journal of the veal industry - The Vealer - has published articles linking stress and disease. For example, Dr. Robert Blease wrote in 1980:

> A Holstein bull calf, raised in a pen, in a controlled environ~~ment and fed only milk is unde~~r extreme stress...Stress is the root or source of all our problems. Reduce stress and you reduce mortality. Most diseases overcome the animal when he is exposed to stress!.[2]

Studies by Dr. Ted Friend of Texas A & M University Department of Animal Science have proven that the more confined a calf is, the more stress it exhibits and the less able it is to fight off disease. These studies show that close confinement of calves decreases overall productivity through stress-induced physiological changes. The concurrent lack of exercise can also lead to chronic stress and lameness.[3]

It is, therefore, not surprising that Dr. Friend has found confined calves require five times the amount of medication needed by yard and hutch calves. Excess use of antibiotics and other medication can, in turn, have serious ramifications for the health of those who consume the meat.

The larger enclosure specified in H.R. 84 would reduce stress by allowing more freedom of movement.

Lack of Social Contact

These naturally playful animals are deprived of social contact when confined in the current crate. This confinement contributes to stress-related health problems. Although an enlarged crate would not provide more direct contact than is possible in the current crate, perhaps the calves' ability to move around would allow them to see other calves and encourage the direction of play movements toward other calves.

Difficulty in Early Detection of Disease

When veal calves are confined in the current crate they are prevented from expressing natural behavior. Since a change in behavior can indicate health problems are developing, the enlarged crate would increase the farmer's ability to detect and treat health problems at an early stage.

Inability to Adopt Normal Postures

The current crate also interferes with calves' ability to relieve heat stress by lying flat on their sides. As calves grow, the crate size prevents it from comfortably adopting its preferred sleeping posture - tucking its head into its side.[4] In addition, confinement and lack of exercise prevent the calf from fully ventilating its lungs. This creates dead space in the lungs and can lead to pneumonia.[5]

AMENDMENT TO H.R. 84

While we believe H.R. 84 would alleviate many inhumane practices associated with the current crate, The HSUS is concerned about the possibility that the bill's language would permit the inhumane practice of tethering to continue.

Therefore, we suggest that the language of the current California bill, S.B. 1110, be added in Section 3 after subsection A. With the added language subparagraphs (A) and (B) would read:

> (A) of which the smallest dimension is less than the length of the calf, measured from the tip of its nose to the base of its tail, plus 6 inches; or
>
> (B) **otherwise prevents the calf from standing up, lying down, turning around, grooming itself, or from making other normal postural adjustments.**

TRANSPORTATION - A FUTURE TOPIC

Although veal calf acquisition and transportation is not a topic of discussion today, The HSUS believes it should be addressed in the future. Many other countries have stopped the sale of one- and two-day-old calves and have corrected other transportation abuses. For example, Alberta, Canada doesn't allow the sale of calves less than eight days old, or the unloading of an ill or unsteady calf.

In the U.S., one- and two-day-old calves are trucked long distances to auction barns, mixed with calves from other areas, and subjected to rough handling and adverse weather conditions. We would like to see calves kept on the farm for five days. Then they should be transported directly to a veal barn or shipped through only one auction market in a thirty-day period.

ARGUMENTS AGAINST ENLARGING THE CRATE

Those opposed to enlarging the current crate argue that calves will defecate and eat in the same spot, crate-licking will increase, and alternative systems are not economically feasible.

Defecation in Food

In the current crate, the calf is positioned to face its food and to defecate where it stands. A change in crate design would allow growers to use the enlarged crate but still prevent the calf from defecating in its food. One possible solution is the placement of a small step in front of the feeding area. A calf will step forward to eat but is reluctant to back up the step. This will prevent the calf from contaminating its food with feces.

Crate-licking

It is claimed that enlarging the crate will allow the calf to lick the sides of the crate and ingest contaminants. Studies have shown that crate-licking is associated with a combination of extreme physical restriction, an iron-deficient diet, and the lack of solid food.[6] H.R. 84 addresses crate-licking by removing all three of these restrictions.

Economics

Many in the veal industry argue alternative, more humane ways of raising veal calves are economically impractical. This is simply not true. There are many examples of profitable, humane alternatives in use in Europe as well as in our own country. Examples include dairy calf hutches currently in use in the dairy industry, group pens (such as those used by Summerfield Farm in Boyce, Virginia, and the Rambling Rose system), and the combination of individual hutches for young calves and group pens for older calves.[7] Calves raised in a more natural environment are less stressed, healthier animals and need fewer antibiotics. The Bennett bill would improve the calf's environment without mandating hutches or group pens.

PROBLEMS WITH THE DIET

H.R.84 also addresses the deficiencies found in the diet of many veal calves kept in close confinement: insufficient iron and the lack of solid food.

Anemia

Iron is often severely restricted in a veal calf's diet to ensure a pale meat. This practice results in anemia. Severe anemia causes a lack of appetite and disease. Borderline anemia results in general weakness, susceptibility to disease and decreased productivity. It can also lead to injuries during transport.

Disease, rate of growth, and stress are additional factors that influence meat color. If stress and disease are minimized, severe restriction of iron is even less necessary.

H.R. 84 suggests referring to National Research Council recommendations for iron intake. The NRC recommends an iron level of 100ppm for calves up to three months of age and 50ppm thereafter.[8] Veal calves often receive as little as 10ppm.

If NRC iron requirements are not met, hemoglobin monitoring is essential to prevent the onset of anemia.

Need for Solid Food

Calves crave solid food. By the time they are two months old they digest solid food through a natural, repeated chewing process called rumination. But most veal farmers only provide the calves a liquid diet.

A diet that does not include solid food results in abnormal development of the rumen, the large first compartment of the calf's stomach. When this happens, calves satisfy their craving for solid food by excessive grooming, crate-licking and purposeless oral activities such as tongue rolling. Excessive grooming results in hairball formation that may lead to chronic indigestion.[9]

Rumination also builds up a population of normal microorganisms which are an important deterrent to intestinal diseases which decrease productivity.

Some solid foods cause the meat to be pinker. Unfortunately, the consumer has been "programmed" to think this meat is less desirable. The result is that veal calves are being deprived of a proper diet just to provide this pale white meat. In fact, the color of veal has little to do with taste. Although producers have promoted white veal for years, it has become clear through taste tests and the choice of some of the nation's top chefs that the best veal does not have to be white.

"THE GREAT WHITE HOAX"

In a 1979 article in New York Magazine, Peter Lovenheim called the promotion of white veal "the great white hoax". Lovenheim confirmed that taste alone cannot differentiate white veal from pink veal.[10,11] Producers and chefs have erroneously convinced the consumer that white veal was superior, and this misconception has forced the farmer to comply with market demands which are not justified.

According to Lovenheim, producers themselves admit that taste tests don't find white veal superior and that promoting veal on color was a marketing gimmick.

A representative of one of the leading producers, Robert

Cody of Provimi, said:

> If you took two calves on the Provimi program and one was a little darker than the other, I understand when you cook them up you can't tell the difference... I'm sure both would taste the same...It's a visual thing.[12]

Provimi vice president Guy Tober said, "It's all a psychological thing. If you put them both (red and white) in a frying pan, they'll even look the same." He also acknowledged:

> The worst mistake we ever made was to sell this meat just on color. But 15 years ago, we didn't have the kind of clout we have today. We had to push the white color. Color was the only guarantee the consumer had our veal was milk-fed. But now the consumer says, "If it's not white, I won't buy it."[13]

This "great white hoax" has resulted in a cycle which involves producers, packers who believe consumers prefer white veal, farmers who are forced to raise animals in close confinement and feed them a liquid diet because they are penalized for supplying "red" veal and the consumer who is being told by the producer that the best veal is white.

A number of chefs at the finest restaurants in this country have served pinker, humanely raised veal to their patrons. Jean Louis Palladin at the Watergate in Washington, D.C. and Wolfgang Puck at Spago in Hollywood, California, are two examples. If less emphasis were placed on color as a grading factor and we could dissipate consumer and packer misconceptions about veal, then the veal companies could offer a pinker meat that tastes as good as white, costs less, is more nutritious and eliminates the need to raise calves with borderline anemia.

By requiring a solid food diet with proper iron levels, Congressman Bennett's bill would destroy the "great white hoax". Consumers would find that so-called "milk-fed" veal is not superior to humanely raised veal.

CONCLUSION

The Humane Society of the United States hopes that this hearing marks a turning point in improving veal calf management. While we would prefer group housing systems, we recognize that they are vehemently opposed by many in the veal industry. Congressman Bennett's bill represents an excellent compromise between the current crate system and the group housing systems.

The current crate system which has resulted in chronic stress, physiological and behavioral problems should be abandoned in favor of the enlarged crate. It has been stated that if calves aren't healthy, they won't gain weight. We maintain that gaining weight should not be the only indication of good health. It does not take a veterinarian to recognize that an animal which is borderline anemic, given a large amount of antibiotics, not allowed to turn around and suffers from chronic stress is not healthy. These health and welfare problems can be alleviated by giving calves more space, solid food and sufficient iron.

We are aware of the claims that legislation such as this, if enacted, would put veal farmers out of business. I want to reiterate that this is not our intention. Our goal is the humane treatment of the veal calf. We believe that humane treatment as expressed in the provisions of H.R. 84 can also benefit the farmer by leading to healthier calves, a more profitable farmer and a more nutritious product for the consumer.

In closing, The HSUS recommends that a task force be established to study the merits of alternative methods of raising veal calves and advise USDA in establishing calf-feed standards and training programs for veal growers as provided under Section 4 of H.R. 84. This task force should include industry representatives, producers, packers, university professors, representatives of agricultural extension agencies and animal protection groups, a bioethicist and a livestock design expert.

We want to work together, and we are confident that our differences on the treatment of veal calves can be resolved if we maintain a dialogue on this issue.

FOOTNOTES

[1] R.W.F. Brambell, Report of the Technical Committee to Enquire in the Welfare of Animals Kept Under Intensive Livestock Husbandry Systems (London: H.M. Stationery Office, 1965), Cmnd. 28, 36.

[2] R. Blease, "Ask the Vet," The Vealer (Jan./Feb., 1980), p. 7.

[3] T. Friend, G. Dellmeier and E.E. Gbur, "Comparison of four methods of calf confinement. II. Behavior, "J. Animal Science, 60 (1985), 1095-1101.

[4] J. Webster, C. Saville and D. Welchman, Improved Husbandry Systems for Veal Calves (Langford, Bristol: University of Bristol School of Veterinary Medicine, 1986), pp. 155-157.

[5] M.W. Fox, Farm Animals: Husbandry, Behavior and Veterinary Practice (Baltimore: University Park Press, 1984), pp. 95-103.

[6] Ibid. pp. 95-103.

[7] For additional information, contact Summerfield Farm, Rt. 1, Box 43, Boyce, Virginia 22620, (703)837-1718, and FACT, P.O. Box 14599, Chicago, Illinoic 60614 (312)525-4952.

[8] National Research Council, Nutrient Requirements of Dairy Cattle (Washington, D.C.: National Academy Press, 1989), p. 33.

[9] N. Wiswall, The Production of White Veal as an Animal-Welfare Issue (Washington, D.C.: The Humane Society of the U.S., Feb., 1989), ~~p. 2.~~

[10] R. Gardner, "Comparison of milk and fat supplemented grain rations for veal," Feedstuffs (Mar. 7, 1970), p. 24.

[11] P.C. Lovenheim, "Veal: The Great White Hoax?," New York (Nov. 5, 1979), p. 66.

[12] Ibid. p. 70.

[13] Ibid. p. 71.

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STATEMENT OF DAN HOWELL

CENTER FOR SCIENCE IN THE PUBLIC INTEREST

Before the

SUBCOMMITTEE ON LIVESTOCK, DAIRY, AND POULTRY
And the
SUBCOMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH,
AND FOREIGN AGRICULTURE

HOUSE COMMITTEE ON AGRICULTURE

Washington, D.C., June 6, 1989

Mr. Chairman and members of the subcommittee, thank you for the opportunity to testify on H.R. 84, a bill to prohibit certain practices in the raising of calves for veal. The Center for Science in the Public Interest is a non-profit consumer advocacy group that represents over 150,000 members. I am project director of Americans for Safe Food, a CSPI project that encourages the production and marketing of foods produced without or with less use of harmful chemicals.

Today's hearing comes at a time when growing public concern over food safety has combined with reduced public confidence in the federal food safety programs to create a heightened interest among consumers in food production methods. Illegal drug residues in calves have long been a problem for federal regulators, and recent information indicates that formula-fed veal poses an especially serious problem, one that is directly related to the veal calf feeding practices that H.R. 84 addresses.

The U.S. Department of Agriculture and the Food and Drug Administration have been aware of drug residue problems in veal calves for some time, but have not brought the problem under control. In general, federal efforts to control illegal drug residues in food have come under intense criticism in recent years from both the USDA's Inspector General Office and from the Congressional subcommittee with oversight responsibility for the regulation of animal drugs.

Given the difficulties faced by federal agencies in preventing illegal drug residues in formula-fed veal, we believe setting minimum feeding standards may prove more effective in ensuring that veal is produced in a safe manner.

Formula-Fed Veal: 3.2% Antibiotic Residue Violation Rate in 1988

Prior to 1988, the violation rate for antibiotic residues in veal calves had been increasing,1 but it was not clear what classes of veal were responsible for the increase, since USDA residue monitoring data did not distinguish among the various categories of bob, formula-fed, non-formula-fed, and heavy calves.

In 1988, USDA began to maintain violation data according to different categories of calves. The results of USDA monitoring data for drug residues in calves, released last month,2 show that formula-fed veal had the highest violation rate for antibiotics: 3.2 percent, almost three times as great a violation rate as for any other class, including non-formula-fed veal.

1. "Antibiotic Residue Rate in Cows on Increase Since 1984, FSIS Reports," Food Chemical News, 7-18-88, p. 35.
2. The test results and statement released by USDA/FSIS is submitted for the hearing record as Attachment A.

A violation rate of 3.2 percent is considered high, in part because USDA residue monitoring is largely unable to take into account the many unapproved drugs that may have been administered to a given species under FDA's extra-label-use policy. In fact, a National Academy of Sciences 1985 report, Meat and Poultry Inspection, termed an overall antibiotic violation rate of 1.48 percent "very high indeed."

No Animal Drugs Are Specifically Approved for Use in Fancy Veal

Last month, FDA officials advised the formula-fed veal industry that "no drug, not a single drug...is specifically approved at this time for use in fancy veal."3 FDA permits veterinarians to use animal drugs (except growth hormones) that have not been approved for a particular species or at a particular dose. But FDA's policy of "extra-label use" does not excuse liability for violative drug residues resulting from the extra-label use. Thus, if a veterinarian were, under the extra-label use policy, to administer a drug approved only for beef calves to a fancy veal calf, it would be important to know whether the drug's stated withdrawal time would be the same for both types of animals.

In fact, FDA studies have shown that the the drug withdrawal times that would be adequate to ensure safe residue levels in ruminating calves are not sufficient for non-ruminating, formula-fed calves.4 Thus an FDA official recently advised at last

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3. "No Drugs Approved for Veal Calves, CVM Tells Producers," Food Chemical News, 5-29-89, p. 41.
4. Ibid, p. 43.

month's meeting, "we have to assume that withdrawal times established for beef cattle may not be long enough for drugs to deplete to safe levels in fancy veal calves."5

Drugs Found in Some Fancy Veal Could Pose a Risk to Human Health

Antibiotic residues can sometimes pose a risk to individuals who are especially sensitive to them. In addition, antibiotics administered in feed or therapeutically to animals can contribute to the development of resistant strains of bacteria.

Tetracyclines accounted for over half of the illegal residues found by USDA in formula-fed veal in 1988. In 1977 FDA sought to outlaw the use of tetracycline and penicillin in animal feed, out of concern that the subtherapeutic use of antibiotics in farming was contributing to the growth of "supergerms" that were resistant to these drugs, ultimately reducing the effectiveness of these same antibiotics in the treatment of human illness.

In addition to the antibiotics that accounted for the 3.2 percent violation rate in formula-fed calves, USDA has also been concerned about the possibility of contamination of veal with chloramphenicol, an antibiotic which has been banned for use in food producing animals. About 1 in 40,000 persons consuming meat containing residues of chloramphenicol contracts aplastic anemia, a fatal disease.6 USDA field tests in 1987 of a chloramphenicol

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5. *Ibid*.

6. "Imported Meat and Livestock, Chemical Residue Detection and the Issue of Labeling," U.S. General Accounting Office, September 1987, p. 17.

card test turned up a number of suspect violations in calves.7

USDA, FDA Unlikely To Resolve Residue Problem in Fancy Veal

USDA has stated that in response to high antibiotic violation rates in fancy veal, the agency may institute a surveillance program "similar to the bob veal program."8

But USDA's bob veal program has been beset by problems for years. The Calf Antibiotic Sulfa Test (CAST) regulatory program is based on intensive testing, using a multiresidue test that detects several antibiotics, and on a system of producer certification of calves as drug-free. Because of problems with the test, USDA has twice made its CAST test less sensitive (so that it is less likely to yield a positive result).9 Even so, the CAST violation rate has been mired at the 1.5 - 2 percent level for years. (In 1987 and 1988, the rate was 1.7 percent.10)

In a stinging September 1986 report, USDA's own inspector general found false certifications to be "widespread" in the calf certification program, while "no producers [have] been prosecuted."11 The inspector general study "identified 530 producers who had marketed certified calves that were found to contain illegal levels of drug residues."12

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7. "USDA Planning Expanded Sampling for Chloramphenicol, Neomycin," Food Chemical News, 7-20-87, p. 11.
8. USDA/FSIS Summary, "Residue Testing for Veal," is submitted for the record as Attachment B.
9. "Calf Antibiotic/Sulfa Test Violation Zone Narrowed by FSIS," Food Chemical News, 6-23-86, p. 29.
10. See Attachment B.
11. Audit Report, "Food Safety and Inspection Service, Meat and Poultry Inspection Program," USDA Office of Inspector General, September 1986, p. 20.
12. Ibid, loc. cit.

FDA's animal drug regulatory program was the subject of a devastating 1985 report by the Intergovernmental Relations and Human Resources Subcommittee, which specifically charged that FDA's Extra-Label Use Policy violated the Food, Drug, and Cosmetic Act. The report noted that the policy "increases the public's exposure to residues that are likely to go undetected by USDA's routine monitoring program," since methods for detecting animal drug residues are generally not available for drugs used by veterinarians in unapproved species.13

H.R. 84 Would Prevent Feeding Practices Associated With Residues

H.R. 84 would make it unlawful to knowingly feed any calf food which does not meet specific standards that would be set by the Secretary of Agriculture. The bill would require the Secretary to set standards that provide "a sufficient supply of palatable and digestible solid food and iron to maintain the calf in good health," section 4(b)(1). Feeding calves nutritious solid food that allows for normal development of the rumen should help significantly to address the problem of illegal drug residues associated with non-ruminating, formula-fed veal.

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13. "Human Food Safety and the Regulation of Animal Drugs," House Report 99-461, December 31, 1985.

(Attachments follow:)

Attachment A

CALVES
YEARLY SUMMARY CY 1988
[illegible] SURVEILLANCE BY SLAUGHTER CLASS

Compound	BOB VEAL Samples	Violations	%	FORMULA-FED VEAL Samples	Violations	%	NON FORMULA-FED VEAL Samples	Violations	%	HEAVY CALVES Samples	Violations	%	TOTAL Samples	Violations
Chlorinated Hydrocarbon	249	0		271	0		240	0		83	0		851	0
Antibiotics	266	3	1.1	1359	43	3.2	1302	14	1.1	253	3	1.2	3182	61
Chlorinated Organo Phosphates	280	0		271	0		240	0		83	0		852	0
Sulfonamides	260	2	0.8	292	2	0.7	249	2	0.8	260	4	1.5	1067	10
Ivermectin	0	0		265	0		256	0		256	2	0.8	967	2
[illegible]	0	0		257	0		226	0		8	0		491	0
Total	1050	5	0.5	2775	45	1.7	[illegible]	16	0.6	953	9	0.9	7240	75

SUMMARY OF [illegible]

	BOB VEAL	FORMULA-FED VEAL	NON FORMULA-FED VEAL	HEAVY CALVES	TOTAL
Penicillin	0	4	3	0	7
Streptomycin	2	6	5	0	11
Tetracycline	0	13	0	0	13
Neomycin	0	7	3	1	11
Oxytetracycline	0	6	2	1	9
Gentamicin	1	10	3	0	14
Sulfamethazine	1	2	2	4	9
Sulfathiazole	0	0	0	1	1
[illegible]	1	0	0	0	1
Erythromycin	0	0	0	2	2

Antibiotic Residue Findings in Formula-fed Veal - 1988

Prior to 1987, calves were considered as one slaughter class for both slaughter populations and residue sampling. In 1987, FSIS collected slaughter data on four calf classes: bob veal, formula-fed veal, nonformula-fed veal and heavy calves. Residue data was then collected in 1988 based on the 1987 slaughter distribution.

Formula-fed veal is defined as calves weighing between 150 and 400 pounds that are raised on a liquid diet up to the time of slaughter. Approximately 1.5 million calves in this class are slaughtered annually. This population represents approximately 1500 producers and 42 slaughter establishments.

The 1988 data showed 43 volations of 1359 kidney samples tested for antibiotics. This is a 3.2% violative rate in formula-fed veal. Kidney is the target tissue for antibiotic residue testing for monitoring. Since the veal kidney is edible, this constitutes a residue violation. The drugs found in order of predominance were: tetracycline (13), gentamicin (10), neomycin (7), oxytetracycline (6), streptomycin (6) and penicillin (4).

Attachment B

RESIDUE TESTING FOR VEAL

The Food Safety and Inspection Service (FSIS), an agency within the U.S. Department of Agriculture, is responsible for assuring that America's meat supply is safe and wholesome. In meeting that goal, FSIS tests all species of animals for residues from drugs, pesticides, and other chemicals.

The two main types of residue testing that are done by FSIS are monitoring and surveillance. Residue testing is done at slaughtering establishments and from import shipments at the ports of entry.

Monitoring is designed to provide 95% assurance that a residue problem will be detected if the problem occurs in 1% or more of a species. Monitoring samples are collected on a random basis, and the testing provides profile information on the occurrence of residue violations on a nationwide basis.

A computer selects the slaughtering plants that will conduct residue testing on any given day, as well as how many animals are to be tested and which residues to test for in the animals. From the monitoring test results, FSIS is able to statistically determine what the nationwide violation rate is for a specific residue in each species of animal.

Monitoring of Veal. There are four classes of veal: bob veal, which are from one to three weeks old and weigh up to 150 pounds; fancy veal, or formula-fed veal, which are over three weeks old, weigh between 150 and 400 pounds, and are fed a liquid diet; grass fed veal, which are also over three weeks old, weigh between 150 and 400 pounds, but are fed a solid diet; and heavy or Western veal, which weigh over 400 pounds.

Of the 2.4 million veal slaughtered in 1988, 7,240 were tested under FSIS' residue testing program, or about 3.3 percent. This compares with 7,150 cattle tested of the 32.7 million slaughtered, or .02 percent.

The residue violation rate for veal in 1988 was 1.0 percent. In 1987, the violation rate was 1.4 percent. The most common types of violative drug residues found in veal calves are from antibiotics, such as tetracycline.

Surveillance testing is conducted when a residue problem is detected — either through monitoring results or through other information received by FSIS. Surveillance testing is designed to investigate and stop the movement of potentially adulterated products into commerce.

Under surveillance testing, the sampling is biased, unlike the random sampling done under monitoring. Therefore, surveillance testing results cannot be reported as a nationwide violation rate.

Surveillance testing for veal. Because of past abuses of sulfa drugs in bob veal calves, FSIS is conducting special, intensive drug residue testing of bob veal. CAST, or Calf Antibiotic and Sulfa Test, detects the presence of antibiotics and sulfa drugs. CAST is a rapid test that can be conducted on-site in bob veal slaughtering or processing plants. Any violation found under CAST results in immediate condemnation of the calf.

In 1988, CAST was run on 180,728 bob veal. Of those, 3,095 were found to have positive levels of antimicrobial drugs, and the animal carcasses were immediately condemned. While the tests were being run, the carcasses were held at the slaughtering plant.

In 1987, CAST was run on 195,867 bob veal, with 3,380 found positive for residue violations. Approximately 1.3 million veal were slaughtered nationwide in 1987. Before CAST was implemented in 1984, antimicrobial violations in bob veal under the monitoring program were approximately 7 percent.

The level of surveillance testing that is done in each veal slaughtering plant is based on the number of violations found in each individual plant. If a plant has very few drug residue violations in veal calves, perhaps only 1 or 2 percent of veal will be tested. Other plants, who have had numerous violations, are required to have 100% of the veal passing through their plant tested.

CAST is not run on fancy veal calves because USDA regulations currently only permit the test on bob veal. However, because of residue problems that have recently been found in fancy veal, FSIS may implement a surveillance testing program for fancy veal similar to the bob veal surveillance program.

Testimony of Michalynn Wagner
Marque of Nebraska, Ltd.

Mr. Chairman, Congressmen and Congresswomen:

Thank you for the opportunity to express my views on the issue of veal husbandry before this Agricultural Sub-Committee and to assure you there is a market for humanely raised, drug free pink veal.

I was born and raised in Grand Island, Nebraska. Over 90% of Nebraska's incomes are provided by Agri-business. Beef is the number one source. Even though I grew up in town, I spent a considerable amount of time on the farm. My father was raised on our 160 acre farm in Hamilton County. I spent seven years as an Ag-oriented commodity broker. I feel that because of my background I have an objective, rather than an emotional opinion.

My first dining experiences with veal took place at upscale restaurants I visited while working as an Ag commodity broker. From my first experience I enjoyed the taste of veal. Initially, I recognized veal was an item on most menus in up-scale dining establishments. While attending a Weight Watchers meeting I learned the value of veal as a protein to be consumed at home, as well as at the restaurant. In 1982 Merrill Lynch transferred me to Chicago where I was quite surprised to find veal taking up a space in the meat counter at the grocery store equal to the space allowed pork in stores accross Nebraska. It was sometime later when I learned about the typical factory farm method of production of veal calves. My enthusiasm for veal was dampened somewhat when I became aware of how this type of veal was raised.

As a result of my new found awareness, in 1985 I started to research the possibility of working with an alternative veal. I became aware of a commitment by Stagabroga Ranches, Ltd. in Alberta, Canada to raise a superior veal product "by mother in the sunshine and fresh air". At this time I would like to read Chef Detlef Skrobanek's, (at that time Chef of the Four Season Hotel in Calgary) letter to Stagabroga. Chef Detlef is the first chef in North America to use this veal. He was so delighted with these humanely raised veal calves that when he transferred to Jakarta, Indonesia, calves were slaughtered in Alberta and shipped to him in Indonesia.

With Chef Detlef's response as a guide I too began a search for a superior veal. I describe superior veal as veal that is humanely raise, non-anemic, without total dependence on sub-therapeutic dosages of drugs, that is flavorful, yet delicate, and of course, tender.

In August of 1987 I began to put Marque of Nebraska, Ltd., together. My first customer was Billy's Restaurant in Lincoln, Nebraska. The consumer response was amazing, especially considering that in Lincoln, Nebraska we just don't eat that much veal.

In August of 1988 I incorporated Marque of Nebraska, Ltd. for the purpose of marketing a naturally milk-fed veal. In order to market the end product I need contracted production. Every producer I contract with has to meet my standards. The calves are raised with their mothers so that mothers milk is their primary source of nutrition. Since the pairs are on pasture or grazing on corn stalks or wheat grass, the calves forage as well as milking, allowing for natural rumen development. These calves do not eat antibiotic feed nor are they implanted with hormones.

At this point in time I have marketed Vitellone in the Bay Area of California, Missouri, Kansas, Nebraska and will start to service the Minneapolis/St. Paul market in mid-June.

Periodically, my phone rings or I will come home to a message on the answering machine from a chef or restaurant owner inquiring about my "range-fed veal". I have responded to calls from Palm Beach, Florida, Lake of the Ozarks in Missouri, New York City, Minneapolis, Minnesota, Atlanta, Georgia, several California locations and Wichita, Kansas. My only regret is that I do not have an adequate supply of prioduct to meet the demand.

Perhaps I may sum up by borrowing language from one of my customers, Chef Curt Clingman at Olivetto in Oakland, California, "As you know it is important to us at Olivetto to find animals that are not only raised with a proper diet but also in a humane fashion."

I invite you to read other letters from chefs provided in my written testimony as well as from the Mid-Nebraska Ag Development Corporation and the University of Nebraska.

Were the Bennett bill enacted all veal could be raised in a humane, non-anemic, drug free and profitable manner. All consumers would benefit, rather than a select few.

(Attachments follow:)

Four Seasons Calgary
CALGARY CENTRE
CALGARY, ALBERTA, CANADA T2G 2E1
TELEPHONE (403) 266-7331 TELEX 038-24711

EXECUTIVE OFFICE

4 July 1983

TO WHOM IT MAY CONCERN:

RE: Romark Veal

I wish to confirm that the Four Seasons Hotel in Calgary purchased forty (40) sides of Romark Veal from Stagabroga Ranches Ltd. of Priddis, Alberta in 1982. I was very much impressed with the quality and flavour of this veal. We used much of the product in the Wheatsheaf Restaurant and many of the finer cuts were used in our Trader's Dining Room. We were quite pleased to discover that there is fresh veal of this calibre being raised here in Alberta and being made available at a very reasonable price.

In addition, I found that all of our dealings with Stagabroga Ranches Ltd. were conducted in a businesslike and fully satisfactory manner.

I therefore am pleased to personally recommend both the product, Romark Veal, and the company by which it is raised and distributed, Stagabroga Ranches Ltd.

Yours truly,

DETLEF SKROBANEK
Executive Chef

Oliveto

TRAVIS,

I THOUGHT I'D WRITE A QUICK YEAR-END NOTE OF MY IMPRESSIONS ON THE MARCHIGIANA VITELLONE THAT WE'VE SAMPLED AND STARTED TO USE ON OUR MENUS.

I FIND THAT THE CARE USED IN RAISING THESE ANIMALS IS VERY EVIDENT IN THE FINAL PRODUCT. THE TEXTUR IS AS VELVETY AS WHAT I'D FOUND IN THE FINEST VEAL WHILE COOKING IN ITALY. THE FLAVOR HAS A WONDERFUL SWEETNESS THAT WAS ESPECIALLY TRUE IN THE RACK/LOIN MEAT. SADLY I'VE FOUND IN OTHER PRODUCTS THAT YOU MUST USE LEG CUTS TO HAVE A VEAL DISH WITH MUCH FLAVOR AT ALL, NOT TRUE WITH THE VITELLONE.

AS YOU KNOW IT'S IMPORTANT TO US AT OLIVETO TO FIND ANIMALS THAT ARE NOT ONLY RAISED WITH A PROPER DIET BUT ALSO IN A HUMANE FASHION. THIS MAKES YOU PRODUCT A STAND OUT IN THE VEAL MARKET AS I KNOW IT, AND A DECIDING FACTOR IN WHO TO DO MY BUSINESS WITH.

LOOKING FORWARD TO DOING JUST THAT IN '89 AND ON.

CURT CLINGMAN
EXEC. SOUS-CHEF

Cafe & Restaurant · 5666 College Ave., Oakland, California 94618 · (415) 547-4581

Billy's

March 16, 1989

Michalynn Wagner
Marque of Nebraska, LTD.
P. O. Box 859
Grand Island, Ne. 68802

Dear Ms. Wagner:

Once again it is a pleasure to be serving Vitellone at Billy's. During your test market the response was excellent. Our staff is pleased to be selling the product and our diners are making very favorable comments.

I am particularly impressed with the quality and the flavor of this veal product. Even though it is slightly darker in color from traditional veal, when we cut it, slice it and serve it, everybody is very happy. It is also encouraging that veal of this calibre is reasonably priced.

I will continue to use Marque of Nebraskas' Vitellone as long as the supply is available.

Yours truly,

Nader Farahbod, Executive Chef

OLD MILL
RESTAURANT
& WINE BAR

Michalynn Wagner
Marque Of Nebraska
P.O. Box 849
Grand Island Nebraska 68802

March 2, 1989

Dear Michalynn,

I want to let you know how much I enjoyed preparing your vitellone. I have prepared many different cuts of veal in my restaurant but never a quality that was even close to yours!

In my own kitchen we usually prepare our own escalope so that we can control the quality of the cut and age of the leg or primal.

In sauteing your cutlets each one was tender and an excellent quality. Judging from the comments from the guests that evening they too thought it was the best.

Having been in this industry for twenty years it is truly a pleasure to prepare a product that clearly top notch.

Thank for this opportunity to prepare your vitellone.

Sincerely yours,

Dennis Zehr Propietor

Jasper's
Italian Restaurant
& LOUNGE
405 W. 75TH STREET
363-3003
Kansas City, Missouri 64114

Ms. Michalynn Wagner
Marque of Nebraska
P.O. BOX 849
Grand Island, Nebraska 68802-0849

April 20, 1989

Dear Ms. Wagner,

I have been using Marque of Nebraska Vitellone for one month in my dining room and have had nothing but raves from guests about the Veal Chop Pizziola. The eye of the rack is much bigger than other veal companies and yet the meat is darker than a milk fed product it is much tastier. Please find enclosed the recipe for the Chop the way we serve it. Please keep the supply of Vitellone coming to Kansas City for the enjoyment of our guests.

Thank You,

Leonard Paul Mirabile

LPM/vl

NAME: VEAL CHOP PIZZIOLA
CATAGORY: VEAL
SERVED: 1

QUANTITY	MEASUREMENT	PREPARATION	INGREDIENT
1	2 INCH THICK		VEAL RACK CHOP
1	TSP.	MINCED	GARLIC
1/8	TSP.		SALT
1/4	TSP.		RED PEPPER
4	WHOLE	CHOPPED	SAN MARZANO TOMATOES
4	OZ.		JUICE FROM TOMATOES
2	OZ.		OLIVE OIL
1	TSP.	CHOPPED	PARSLEY

CUT A VEAL CHOP FROM THE RIB 2-2 1/2 INCHES THICK. SALT AND PEPPER IT ANC THEN DIP IN OLIVE OIL AND RUB THE GARLIC ON IT. PUT THE REST OF THE OLIVE OIL IN A SAUTE PAN AND PUT THE CHOP IN THE PAN. CRUSH THE TOMATOES OVER THE CHOF AND ADD THE JUICE OF THE TOMATOES AND ADD SALT AND RED PEPPER. SPRINKLE WITH PARSLEY AND LADLE THE SAUCE OVER THE CHOP. PUT THE PAN IN A 500 OVEN AND COOK TILL DONE, LOOK IN NOW AND THEN SO THE CHOP DOES NOT DRY OUT. KEEP PUTTING SAUCE OVER IT AND IF IT GETS DRY ADD SOME MORE JUICE FROM THE TOMATOES TO IT. WHEN THE CHOP IS DONE TAKE IT OUT AND ADD AN APPETIZER ORDER OF PASTA AND MIX IT IN WITH THE SAUCE AND PUT IT ON THE BOTTOM OF THE SERVING PLATE. PUT THE CHOP ON TOP OF THE PASTA AND SPOON SOME SAUCE OVER IT ALL.

Mid-Nebraska Agricultural Development Corporation
"NEW SOWERS FOR NEBRASKA"
P.O. Box 1486 • Grand Island, NE • 68802
Phone: 308-382-9210

Directors
Harold F. Rosenkotter
Grand Island
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Hastings
Charles L. Stonecipher
Hastings
Dudley D. Wells
Axtell
Mark H. Meyer, M.D.
Kearney
Tom Emerton
Cairo
Gary Wieck
Grand Island

October 3, 1988

Ms. Michalynn Wagner, N.T.A.A.
Marque of Nebraska, LTD.
1408 W. 4th
Grand Island, NE 68801

Dear Ms. Wagner:

The purpose of the Mid-Nebraska Agricultural Development Corporation is to assist in implementing new and/or alternative crop and livestock production in Nebraska.

Due to the impact of the Anti-Veal lobby, raising veal in confinement has been reduced. An opportunity now exists for the development of pink or range-fed veal, such as "Marchigiana Vitellone".

It appears that this is an excellent opportunity for Nebraska producers to diversify. We pledge our support to assist your company in developing the type of production necessary for the sale of Marchigiana Vitellone.

Very Truly Yours,

Harold F Rosenkotter
Harold F. Rosenkotter
President

HFR/vjw

University of
Nebraska
Lincoln

Office of Sponsored Programs
303 Administration Building
Lincoln, NE 68588-0430
(402) 472-3171

August 30, 1988

Michalynn Wagner, President and CEO
Marque of Nebraska
P. O. Box 849
Grand Island, NE 68802-0849

Dear Ms Wagner:

Thank you for the business plan for Marque of Nebraska. I had talked with Harold Rosenkotter last week and subsequently had discussed the project with Dr. Elton Aberle, Head, Department of Animal Science at the University of Nebraska-Lincoln. I see that you also have been in touch with Dan Neumeister and Dennis Burson.

Both Dr. Aberle and I agree that the pressures from the Animal Rights groups are going to force out conventional production techniques for veal. The possibility for raising range-fed veal is especially attractive for Nebraska with our excellent range land.

I am forwarding your business plan to Dr. Aberle and will be interested in following the development of this program.

Sincerely,

W. E. Splinter
Acting Associate Vice Chancellor for Research

cc: Dr. Elton Aberle
Dr. Irvin Omtvedt
Dr. Dale Vanderholm

THE LINCOLN STAR
Monday, March 13, 198
PAGE 5

Nebraskan raising Marchigiana veal calves in pasture setting

By Art Hovey
of The Lincoln Star

PHILLIPS — A Washington, D.C., television station is among many that have done a documentary on the raising of veal calves.

They called theirs "Misery on the Menu."

But the sight in this Nebraska pasture is of calves bounding playfully away from their mothers across melting snow, tails held high. There are no chains around necks, no crates too small to turn around in, and no diets deficient in a wide variety of nutrients.

AND THIS IS NO animal-rights activists' dream destined to fade in dawning sunshine. This is the Marchigiana.

Pessimists would say it's not possible to free veal calves from widely reported bondage and make money at the same time. Michalyn Wagner, president, vice president, treasurer, bookkeeper and sole employee of Marque of Nebraska, says the Marchigiana breed imported from Italy makes it possible.

The reputation of meat produced in a traditional pasture setting precedes it. "It is the nature of this particular animal, and that is the primary purpose of this animal is veal."

Her way of establishing the breed in the United States is to line up producers of Marchigiana calves, to be raised in the usual Nebraska cow-calf manner, and to sell the product in prime veal-eating locations, mostly U.S. cities.

"I buy the cattle from the producer, I make the slaughter-processing arrangements, and I market them to the HRI trade — hotels, restaurants, institutional," she said.

Grand Island resident Wagner, a former agricultural commodity broker for Merrill Lynch, is trying to capitalize on growing public opposition to raising veal calves virtually from birth to slaughter in tight confinement and also on the growing popularity of lean cuts of meat.

THE IDEA came together on the basis of her trips to the National Western Livestock Show in Denver, her transfer to Chicago in 1982, and her trip to an international meeting of Merrill Lynch brokers in Canada.

Convinced that she had found a market niche farther south, Wagner finally decided the time was right to get down to business after she came back to Grand Island in 1986.

She said, "One of the nice things about this, too — one day I'm in blue jeans on top of a corral sorting calves. And three days later, I'm boarding a truck to San Francisco to get to a four-star restaurant and sell the product."

Veal is a popular choice at dinner tables in Italy, and Wagner said Marchigiana calves there stay with their mothers until marketing time.

[illegible]

Bill Schuster (left), Michalyn Wagner examine Marchigiana calf.

Dennis Drudik, Beatrice spokesman for the Nebraska Dairy Herd Improvement Association, said he is not aware of the presence of any veal factories in Nebraska. According to Drudik, chaining new-born calf to a crate is not among the choices Nebraska dairymen make as into production.

Brothers Bill and Gordon Schuster raise Marchigiana calves for sale to Wagner through a partnership they have formed with their Phillips neighbor, Roger Obermeier.

WAGNER HAS four other sources of calves in Nebraska now. She is also

Iowa and Kansas. "There's probably less than a thousand available at this time. So I'm on an aggressive campaign to increase the number of Marchigianas."

The Schuster-Obermeier partnership began putting the Marchigiana strain into the feedlot about 10 years ago.

"If the production is there, shoot, we could very easily go into all-veal production," Bill Schuster said. "I wouldn't have any qualms about that at all."

The way they raise calves for veal sale at 4-6 months of age is no different from the way they raise calves that eventually go to the feedlot.

[illegible] in Lincoln became the first regular Nebraska restaurant outlet for Marque of Nebraska beef earlier this month. Chef Nader [illegible] said the initial response from customers has been good.

The meat from calves that eat grass tends to have a redder color than other veal cuts, "but when we cut it, slice it and serve it, everybody is very happy with it. And we are going to keep it as long as she can supply it to us."

He said being able to tell customers that the veal comes from unconfined calves could be a bonus. There has been grumbling at the sight of veal on the menu from some of them, because of what they have read or heard about the subject on the production end.

WAGNER HAS the verbal endorsement of the Animal Welfare Institute in Washington, D.C. Diane Halverson, research associate, said she didn't know what percentage of veal comes from crates.

"But our concern," she said, "is really with finding a more humane way of rearing dairy bull calves that are going to the special-fed veal market. And we think the program Michalyn has going can provide a humane alternative."

The Mid-Nebraska Agricultural Development Corp. based in Grand Island is also following Wagner's program closely. President Harold [illegible] said the broad goal is to help diversify Nebraska agriculture.

"We're trying to be a facilitator to make some of these things happen," he said. "In fact, we're having an investors' meeting next week for Michalyn and potential venture capital people are going to be at that meeting. We expect 30-40 people from central Nebraska to be at that meeting."

Wagner is also stressing that the beef she is selling under the Vitellone name is not coming from calves that are fed antibiotics or had hormone implants. She is

Marque OF NEBRASKA

PRESENTS

Veal IN A European TRADITION

Marchigiana is a breed of cattle from the Marches region of Italy. The fine velvety texture of the meat produced by the Marchigiana in addition to the mothering ability of the cow provides a premium quality veal.

Marque of Nebraska, Ltd. has chosen to name this premium product Vitellone, a truly milk-fed veal since the calves are nursed by mother in an open pasture from birth to processing. Any additional nutrition is derived from such natural sources as pasture and wheat grass, cotton burrs, corn stalks, or natural enzymes. Vitellone calves are not fed antibiotics nor are they implanted with hormones. Unless necessary by law they have not been branded nor have they been dehorned or altered.

If the calf needs medical attention, his antibiotic intake is closely monitored and documented. An animal is not accepted for the Vitellone program if it has been treated with antibiotics.

Marchigiana Vitellone is slightly darker in color than formula-fed veal, but has the same white color after preparation. The diner will experience more flavor, however, it is still delicate, elegant and delectable. It blends extremely well with other foods and flavors.

For additional information regarding Vitellone please contact:

Michalynn Wagner
Marque of Nebraska, Ltd.
1408 W. 4th
P. O. Box 849
Grand Island, Nebraska 68801
308-381-8191

Marque OF NEBRASKA, LTD.
•VEAL IN THE ITALIAN TRADITION•

1408 West 4th • P.O. Box 849
Grand Island, Nebraska 68802-0849
308-381-8181 • FAX 308-384-[illegible]

NUTRITION INFORMATION FOR 3 OZ. UNCOOKED LOIN

Calories	116
Protein	17.5 gm.
Fat	5.1 gm.
Carbohydrates	0
Sodium	54.2 mg.
Cholesterol	52.2 mg.
Saturated Fat	2.46 gm.
Mono-unsaturated Fat	1.82 gm.
Poly	.18 gm.
Total Fat Content of meat	6%

Prepared Statement of Jean-Louis Palladin, Jean-Louis at Watergate

I am pleased to have the opportunity to appear before this committee to testify in favor of H.R. 84, a bill to prohibit certain practices in the raising of calves for veal, and for other purposes. I hope to shed light on this matter from the perspective of someone who has been in the cooking profession for more than thirty years. Although the raising of veal calves is not my field of expertise, during my career I have become acquainted with many of the methods associated with this area of livestock farming. In this vein, I plan to direct my comments towards the potential effects of this bill on the quality of veal products used in America.

I would like to outline the reasons for my support of H.R. 84:

A. I am opposed to any form of animal cruelty, whether the animals are being raised for human consumption or not.

B. I believe that the lifetime confinement of veal calves in undersized crates produces unethical stress conditions resulting in abnormal behavioral patterns, abnormal endocrine and adrenal functioning, physical illness (i.e., respiratory and intestinal diseases) and physical deformation. The extreme weakness of calves raised in this manner is evident in their inability to support themselves once released from their crates.

C. The diet of calves for veal production is of enormous concern to me. The lacing of milk formulas with antibiotics and other more dangerous drugs has been known to cause dangerous side-effects among consumers, including food poisoning. The exact health hazards of contaminated veal are still unknown, and meat inspection projects are inadequate.

As a chef, the quality of veal used in my kitchen is very important, and yet of equal concern to me is the quality of life of these calves. I firmly believe that these two concerns are not mutually exclusive. In a misguided attempt to achieve a superior veal product, some producers engage in unnecessary and cruel behavior by raising calves in undersized crates. An alternative method is to either raise them in pens, averaging 12 to a pen, or if isolation is a major concern, to drastically increase the size of the individual crates allowing the calves to stand up, lie down, turn around, stretch and groom themselves. The crates should be designed to contain the animals without the use of chains or ropes. In addition, if at all possible, a bed of straw is the optimal alternative to slatted floor.

The "pure white veal syndrome" of the industry is partly at fault for the anemic diet fed to calves. Yet, for me, the foremost concern is with the taste, not the color of the meat. Eliminating iron from the diet may produce perfectly white meat, but results in anemic calves and yields no additional benefits in terms of flavor. The ideal diet for young calves is their mother's milk; however, economic pressures eliminate this as a feasible option. In my opinion, a suitable compromise between the current unacceptable practices and natural nursing is high quality powdered formula enhanced with grain. This would not only result in less anemic conditions, but improved gastro-intestinal functioning.

In summation, the present conditions under which veal calves are raised are unacceptable and cruel. Apart from economic concerns, these practices are often defended in the name of a higher quality and more flavorful veal product. I, however, disagree strongly with any such justification and would state instead that these practices result in no discernable improvement. I believe that the regulations and guidelines outlined in H.R. 84 are required for improving the quality of life for veal calves and the overall quality of the veal industry; thus keeping unsafe veal from human consumption.

THE HUMANE FARMING ASSOCIATION
Protecting Human Health and Animal Welfare

My name is Bradley Miller, Executive Director of the 50,000 member Humane Farming Association (HFA).

HFA has been conducting a national campaign to end the abuses prevalent within the anemic, or so-called, milk-fed veal industry.

I am pleased to report that the California State Senate voted last week to approve legislation which would outlaw the practice of chaining veal calves in crates. A growing number of restaurants are taking "milk-fed" veal off their menu's. And several weeks ago, the Raley's supermarket chain joined the boycott of formula-fed veal and pulled the product from all 55 of its stores in California and Nevada.

The vast majority of informed Americans know it is cruel to chain calves in 22" wide wooden crate where they can never walk, or even turn around for their entire lives. They know it is wrong to deprive calves of all solid food and sufficient iron simply to produce an artificially pale colored meat. And they know it is irresponsible to rely upon antibiotics and other drugs as a substitute for proper animal husbandry.

The opponents of HR 84 have made it quite clear that they are absolutely and fundamentally opposed to ANY legislation that would afford protection, however minimal, to farm animals. In fact, some of these livestock lobbies are even on record as opposing animal legislation that has nothing to do with farm animals whatsoever. The arguments put forth against HR 84 and in support of anemic veal production are all subordinate to and reflective of the industry's fundamental opposition to any regulation -- regardless of its merits.

This fact becomes apparent upon critical examination of the specious arguments raised against HR 84.

Industry claim: The practices involved in "milk-fed" veal production are done to keep veal prices low. Legislation would result in higher prices.

Fact: The production of anemic, light-colored veal, is a marketing gimmick designed to produce a high-priced meat. Crate-raised veal currently costs the consumer at least twice as much as veal already raised in compliance with this legislation. (Verifying this fact is as easy taking a trip to the supermarket.)

Industry Claim: If a calf is given enough room to walk or turn around he will eat his own feces.

Fact: Calves that are deprived of all solid food and sufficient iron may be driven to eat their feces since they are

1550 CALIFORNIA STREET, SUITE #6 SAN FRANCISCO, CALIFORNIA 94109
TELEPHONE (415) 485-1495

desperate for essential nutrients. This legislation would correct that problem by providing calves access to a wholesome and nutritious diet.

Industry Claim: If a calf is allowed enough room to turn around he would foul his food and water.

Fact: Feed is not left in or near the crate. The feed bucket is brought to the crate only twice a day. The calf then drinks the liquid formula. As soon as the calf is finished, the bucket is removed. Fouling drinking water would be impossible since the calves are deprived access to drinking water. The only water they receive is what is mixed in the liquid formula. Water is withheld from the calves to encourage them to drink more of their liquid feed.

Industry Claim: Chaining the calves in the crates make it easier to administer medication.

Fact: It is highly improper to immobilize a calf his entire life simply to make it more convenient to administer drugs. In fact, the stress of crate confinement has been shown to increase the need for medication.

All other calves raised in the United States, ie. non-anemic veal, beef, and dairy calves, are allowed enough room to walk and turn around during their lives. The "milk-fed" veal industry is the only segment of the livestock industry to make the incredible claim that it is necessary to chain calves in crates for their entire lives.

Industry claim: HR. 84 is based upon emotion, not science.

Fact: Every credible scientific study conducted on the subject, including those funded by the USDA, have concluded that lifelong confinement in a crate is detrimental to the health and well-being of the calf. Those conclusions, of course, would be of no surprise to most human beings. The veal industry, however, has simply refused to come to terms with these scientific studies.

It is clearly the opponents of HR 84 that have relied upon emotionalism. They would have us believe that simply allowing calves enough room to turn around would lead to everything from imminent bankruptcy of the veal industry to the ultimate downfall of the agricultural economy. These kind of statements are nothing if not sheer emotionalism.

Industry claim: "Federal legislation is unnecessary since states have anti-cruelty laws."

Fact: The industry knows very well this is not true since they are simultaneously lobbying against legislation that would end veal calf abuse on the state level as well. State law enforcement agencies have testified that they are unable to prosecute veal producers for the inhumane confinement of calves.

Most state anti-cruelty laws relate only to cruelty with "malicious intent." Veal producers are not inflicting abuse in the name of maliciousness. They are inflicting abuse in the name of profit. At the present time, abuses that are considered "accepted practices" in the livestock industry are beyond the reach of current anti-cruelty laws, even if the practice in question is "accepted" by only a minority of producers.

Industry claim "Milk-fed" veal is pale in color because the meat is from a young animal, not because the calf is anemic.

Fact: "Milk-fed" veal comes from four month old calves. The light color of "milk-fed" veal is strictly due to the fact that the calves are deprived of normal iron intake which, by definition, results in anemia. The flesh of a four month old calf who is not kept anemic is naturally red, not pale,in color.

Industry claim The calves are babies so they would not normally be eating solid food anyway.

Fact: Calves would normally be eating solid food by the time they are a few weeks old. "Milk-fed" calves are raised until they are four months old, and are deprived of solid food throughout their entire lives. This is extremely unnatural and is simply done to restrict iron intake to produce an artificially pale colored meat.

The entire rational for depriving "milk-fed" calves of solid food is to severely limit iron intake, thus producing anemic, pale color meat which sells for a high price.

Industry claim Veal producers monitor iron intake.

Fact Veal producers certainly do monitor iron intake -- to make sure iron levels stay low. If the calves are allowed sufficient iron, the color of the veal would turn a natural reddish color which would mean less money paid to the producer from the packer.

Industry claim Antibiotics are only used when needed.

Fact Unfortunately, antibiotics are "needed" throughout the calves life. Despite industry claims to the contrary most veal calf feeds are laced with antibiotics. Feeds which are not already laced with antibiotics are supplemented with the drugs by the producer at the veal facility.

Researches at Texas A & M University have testified that crate raised calves require fives times the amount of medication as calves raised in less stressful conditions.

Industry claim: The use of antibiotics in "milk-fed" veal production do not result in higher levels of drug residue.

Fact: The USDA reports that the Antibiotic Drug Residue Violation Rate for "milk-fed" calves are three times higher that all other methods of veal production. (Please see attachment)

Industry claim: Legislation relating to farm animals would set a bad precedent. The legislature has no business regulating livestock or agricultural practices.

Fact: The federal government has already passed laws relating to the humane slaughter, as well has the transportation of farm animals. We also have laws banning certain agricultural chemicals such as the hormone DES and pesticide DDT. The industry opposed those regulations too. This is not to say they have been consistent in their opposition to government "meddling." Certainly not when it comes to using government funds for subsidies and price supports for their products.

Industry claim: If the calves were not in a humane situation they would not gain weight and the producer wouldn't make money. So, veal producers would never to anything that was not humane.

Fact: The essence of the veal industry's argument is that as long as they are making money, no cruelty could possible exist. Weight gain alone is never a legitimate gauge of welfare. Abused animals, are generally able to grow and gain weight despite being raised in an abusive environment. There are numerous factors which influence weight gain such as; concentrated feed; a complete lack of exercise which sharply limits the expenditure of calories; a lack of drinking water which forces the calves to drink more of the liquid feed; growth stimulants; and so on. To say that weight gain is a sure sign of humane treatment is like saying obesity is a sure sign of health.

The issues before this committee are really quite simple. Should a calf ever be allowed to walk, or even have enough room to turn around during his life, or should he remain chained in a 22" inch crate? Should a calf be allowed nutritious solid food during his life, or should he be deprived of his natural diet?

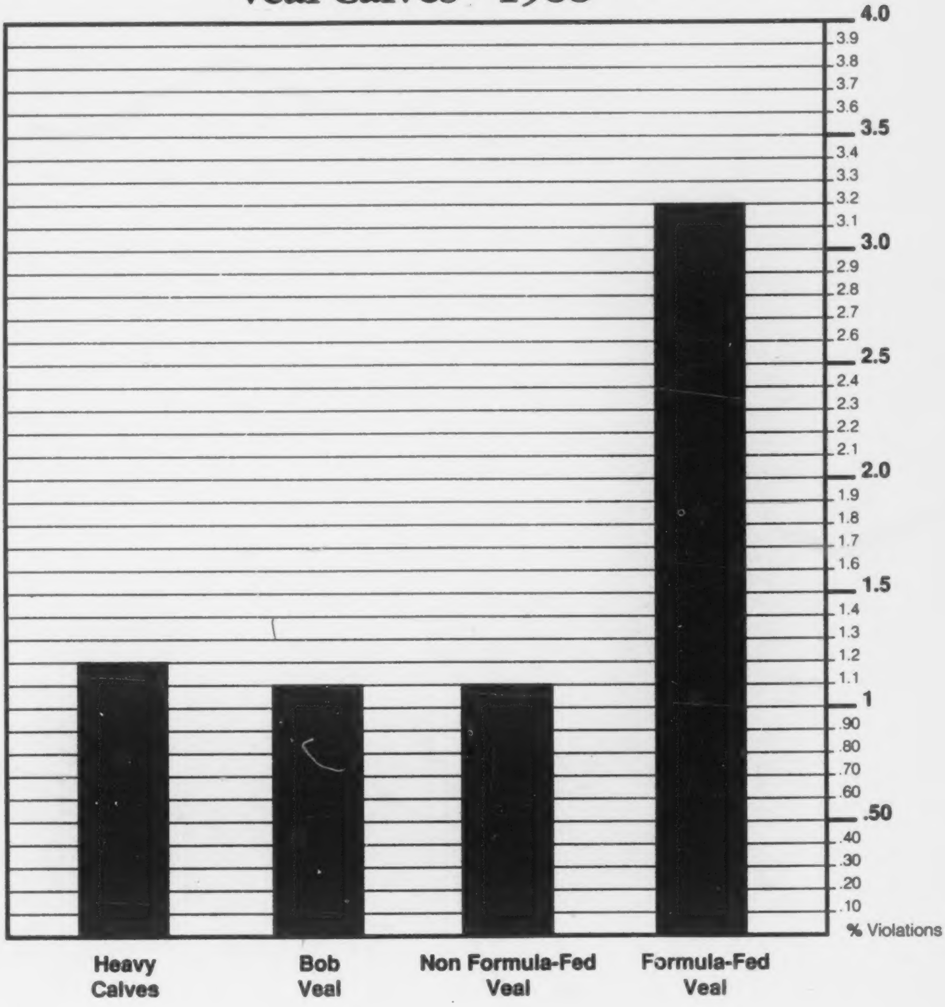
For most Americans the answer is obvious, and is being manifested in an ever growing boycott of anemic veal.

Rather than changing their practices, the veal industry is spending an enormous amount of time and resources in the futile attempt to defend what most American's will always see as utterly cruel and indefensible.

By voting in support of HR 84 this Committee would be doing more than protecting calves from cruelty. This Committee would be be doing more than protecting Americans from tainted meat. By supporting HR 84, this Committee would be saving the veal industry from itself.

(Attachment follows:)

Antibiotic Drug Residue Violations Veal Calves - 1988



Source: United States Department of Agriculture (USDA)

AFIA
AMERICAN FEED INDUSTRY ASSOCIATION

TESTIMONY OF
THE AMERICAN FEED INDUSTRY ASSOCIATION

on

H.R. 84

"THE VEAL CALF PROTECTION ACT"

before the

SUBCOMMITTEE ON DAIRY, LIVESTOCK & POULTRY

AND THE

SUBCOMMITTEE ON DEPARTMENT OPERATIONS,
RESEARCH & FOREIGN AGRICULTURE

HOUSE COMMITTEE ON AGRICULTURE

By

DR. HEBERT W. POLZIN
MILK SPECIALTIES CO.
DUNDEE, ILLINOIS

June 6, 1989

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Chairman Stenholm, Chairman Brown, members of the subcommittees, I am Dr. Herb Polzin, Director of Veal Operations for Milk Specialties Co., Dundee, Ill. As the current chairman of the Animal Welfare Committee of the American Feed Industry Association (AFIA), I wish to thank the subcommittees for the opportunity to appear today to present AFIA's strong opposition to H.R. 84, the Veal Calf Protection Act.

AFIA is the national trade association representing more than 70% of the primary formula livestock and poultry feeds sold annually in the U.S. AFIA's nearly 700 member companies also include firms which manufacture animal health products, equipment and feeding systems and provide services to the domestic feed industry.

The Association's Animal Welfare Committee was created nearly a decade ago, in part to utilize more effectively the work of the AFIA Nutrition Council, formed nearly 50 years ago, and the AFIA Feed Control Committee created in 1909. However, the Animal Welfare Committee also has as its charge to monitor and make recommendations to the AFIA Board of Directors relative to animal welfare/animal rights political developments, and brings to bear the expertise of these three bodies from our industry to place this sensitive issue within a scientific context.

I should also explain Milk Specialties Co. We are a basic manufacturer of baby animal feeds and other milk-based feed products. We are a 40-year-old private company located in Dundee, Ill., doing business both nationally and internationally. Our company employs six full-time nutritionists, with two full-time and two part-time nutritionists involved in our veal operations exclusively. My Ph.D is in ruminant nutrition, with an area of special interest in pre-ruminant nutrition.

Since much of H.R. 84 is directed toward the diet of calves, let me first explain milk replacer-type feed products.

From an industry standpoint, milk-replacer products are not simple combinations of ingredients that are tossed on to the market. The following simplified scenario describes the process by which any milk-replacer product gets from laboratory to veal barn:

To move a milk replacer product from concept to producer takes at least a full year due to research and formulation and the number of nutrition trials necessary. Once a company is satisfied in-house that it has a nutritionally sound product, it then must run the gauntlet of FDA approval. Once this is obtained, all plants manufacturing the product are subject to twice a year FDA-inspection and adherance by the company to FDA's Good Manufacturing Practices. To ignore these is to risk loss of government approval and ability to sell the product.

The obvious criticism of our testimony is that AFIA, my company and companies like ours, have an economic incentive to maintain the status quo. After all, we sell these products and derive a profit therefrom.

If that were the case, every company manufacturing milk replacer feeds--ranging from some of the largest farmer-owned cooperatives in the country to private companies such as Milk Specialties--would be out of business.

The feed industry over-all, and certainly the milk-replacer segment, is highly competitive, with no one company dominating the marketplace. The milk-replacer segment of the industry prides itself on the constant research, quality control and customer-service that creates this productive and competitive atmosphere.

With that background information, let me make some points on H.R. 84 as it would impact the reality of modern veal feeding.

I have reviewed H.R. 84. While AFIA certainly recognizes the admirable intent of Rep. Bennett's bill, we must nonetheless oppose it for numerous reasons. Consider the following impacts of H.R. 84:

I. No Justification

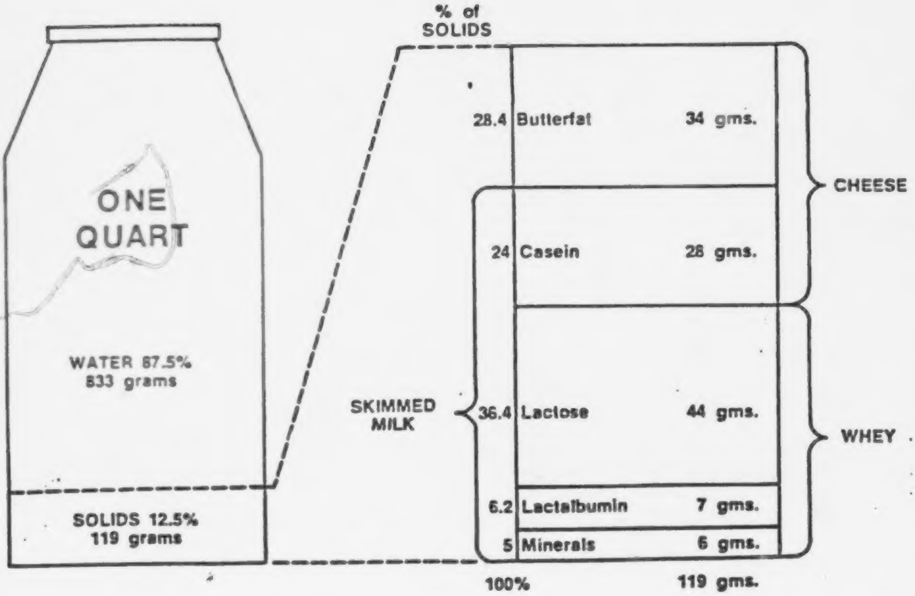
H.R. 84, as we have seen this morning, appears to be based upon a perception of an entire segment of animal production as depicted by one producer. However, the content of H.R. 84 must be evaluated based upon the science, fact and producer experience as they exist in animal agriculture today. I have worked in excess of 20 years with the production of animals and my opposition to H.R. 84 is based on science, experience and how these factors relate to the demand of the American consumer.

H.R. 84 does NOT have a scientific basis, nor does it have any basis in improved animal welfare. To state that nothing in the bill would harm a calf--or that the scientific evidence of harm is lacking--and therefore the bill is good, is akin to saying that raising calves only in balmy Florida is probably good and therefore should be federally mandated.

H.R. 84 puts heavy emphasis on the liquid diet fed veal calves and how it is deficient in solid food and iron, which consequently causes the animals to be anemic and to suffer from digestive and other health problems. The facts surrounding special-fed veal production do not bear out these statements.

II. Diet

The proper formulation of a veal complete formula should logically begin with a basic understanding of cows' milk--the product we are replacing in the feeding of veal calves. The following chart is clear overview of the basic constituents (other than vitamins) of "nature's most perfect food." See chart next page.


ONE QUART
WATER 87.5%
833 grams
SOLIDS 12.5%
119 grams
% of SOLIDS
28.4 Butterfat 34 gms.
24 Casein 28 gms.
SKIMMED MILK
36.4 Lactose 44 gms.
6.2 Lactalbumin 7 gms.
5 Minerals 6 gms.
100%
119 gms.
CHEESE
WHEY

The solids (dry matter) content of whole milk varies somewhat according to season and breed, but ~~is~~ generaly considered to be 12.5%. Using this figure, a quart of fluid whole milk contains the amounts of butterfat, casein protein, lactose (milk sugar), lactalbumin protein and milk minerals shown in the previous chart.

Veal formulas are produced using by-products of the dairy processing and meat industry and various micro-ingredients, such as minerals, vitamins and antibiotics.

Following are some of the major ingredients which are used to prepare veal formulations. Minerals and vitamin supplementation are part of any veal feed product, but are not listed here.

Ingredients:

Dried Skimmed Milk
Dried Whey Protein Concentrate
Dried Whey
Dried Buttermilk
Animal Fat
Vegetable Fat

The composition of milk is used as a criterion to establish guidelines for the nutritional composition of a veal formula. These guidelines must encompass the nutritional requirements of the calf, price availability of ingredients and over-all functionality of the total product mix.

The feed manufacturer's role in compounding a complete formula is one of procuring ingredients at the best price, quality assurance to make sure the products meet nutritional standards and to ensure complete and thorough blending of these ingredients to meet pre-stated, rigid nutritional specifications. The industry is obviously fulfilling a major need in calf nutrition, given the enviable performance of today's formula-fed veal calf.

Typical performance for this type of animal (anatomically a ruminant, physiologically a monogastric) is 2.5 pounds average daily gain for sixteen weeks, with a feed conversion of 1.75 pounds feed per pound of gain. Progressive growers produce even better performance data. This is significantly greater performance than seen in other ruminants.

Complete veal formulas meet all the calves' nutritional requirements from one product. It has been questioned whether solid feed should be incorporated into veal diets. Calves given the opportunity to choose different feedstuffs do not possess the ability to balance their diet for optimum growth and health. Calves in nature inherently prefer cows' milk over dry feeds and forages.

The weaning process forces the calf to consume dry feeds to meet its nutrient requirements for maintenance and growth. Milk proteins are of higher biological value (eg. amino acid profile) and are more digestible. This weaning process in nature has required cattle to evolve into ruminants to allow them to forage.

The veal feed manufacturer and producer provide the true diet of choice for the veal calf. This is demonstrated in mature cattle as they consume more lush, high moisture content feeds and forages rather than the drier diets.

H.R. 84 demonstrates a lack of understanding of this process. Powdered veal formulas are solid feeds which are simply blended with water prior to feeding.

B. Anemia

The allegation that formula-fed veal calves are anemic is untrue. The iron intake of the calf is regulated. The calf is born with moderate levels of iron in the muscle and high levels of iron in the blood. The challenge to the veal grower is to regulate iron intake in such a manner as to produce a lighter meat demanded by the consumer, while not allowing blood iron levels to become low enough to approach clinical anemia. Producers control iron levels in the blood for obvious reasons: The welfare of the calf mandates that it be healthy and economic incentives--since an anemic calf won't eat, and if it won't eat it won't grow--dictate the producer keep him that way. Producers are caring people. They will not let their animals suffer.

C. Antibiotics

Antibiotics are used, when necessary, in the veal growing process. Some companies incorporate no subtherapeutic antibiotics in any feed; while others will provide higher levels of antibiotic in starter feeds, and none at all in finishing rations. Some companies do, however, provide at least some antibiotic in both rations. However, it must be understood: In all commercially prepared feeds, antibiotics are used according to strict FDA regulation.

Calves do get sick no matter how good the producer or the environment. The welfare of the calf must be considered at all times. The use of antibiotics, when appropriate, is a sound management tool used to restore the health of the sick animal. Succinctly stated, proper and timely use of antibiotics enhances calf survival rate and well being. Medications are logically added only as needed, since they become an added cost if used indiscriminately.

It would be folly to suggest there is no controversy surrounding low-level antibiotic feeding. However, we rely on the National Academy of Science panel's recent evaluation, which states there is insufficient evidence to substantiate the doom/gloom predictions of those who oppose this feed use. However, AFIA is on public record in every public forum on this topic: When scientific evidence concludes there is a threat to human health, we will support the withdrawal of these products. This is and has been our committment to the protection of human health.

III. Economic Impact

H.R. 84 contains several components that would be economically devastating to the veal industry, as well as depressing the dairy and feed economies.

American special-fed veal is a billion-dollar industry. It provides jobs and viable outlets for significant quantities of feed ingredients produced in the United States. It is a profitable outlet for the American dairy farmer's bull calves.

The veal industry provides the public with a foodstuff prized for its nutritional value. Implementation of this bill would make production of veal impractical. The use of "solid" feed, in conjunction with inefficient livestock rearing methods, would render the special fed veal industry a helpless victim of high production costs.

A market would be lost that would in turn cost American jobs, businesses could fail, dairy farmers would lose significant value for their bull calves, beef producers would become victims of significant number of male dairy calves used for beef purposes and ingredient suppliers, especially the by-products of the milk processing industry, would lose an entire market outlet for their products. In addition, the consumer loses a product option they have repeatedly demanded.

All with no evidence of appreciable improvement in calf welfare over current systems. We've heard today from witnesses on both sides of this issue that the welfare of the farmer must be at least equally weighed with the benefit--if any--to the animal. Yet no where in H.R. 84 is the economic loss to farmers addressed.

Would the Congress consider indemnifying all calf producers--and reliant industries--for the full economic impact of this legislation?

An especially vexing component of H.R. 84 that relates to economics for veal grower is the requirement that the primary enclosure of the calf be sized such that the smallest dimension is more than the length of the calf, measured from the tip of its nose to the base of its tail, plus six inches. This would mean that the calf stalls as used today in almost all veal barns would have to be at least three times wider. The cost of re-equiping barns to comply with this requirement would be very high. Capacities of barns would be cut to less than one-third of current levels.

It is well known that individual stalls, as used by veal growers, allow for more individual care and detailed observation of animals than calves housed in a group pen environment. Today's veal calf, housed in a proper stall, has the ability to stand, groom itself, socially interact with its neighboring calves and seek its own individual comfort level.

Should the barns have loose housed calves in group pens, performance would be negatively affected. Veterinary costs due to increased health problems would be increased. These factors would result in increased production costs, rendering the operation less profitable and indeed impractical.

IV. Producers are a Responsible Lot

The American Veal Association (AVA) has published guidelines for the proper care and handling of veal calves. An ever increasing number of growers have established a veterinarian-client-patient relationship to guarantee the proper care of animals and produce a product that is free of contaminants.

The vast majority of veal operations are family operated. These families care about their animals, for the animals are their livelihood. These people do not and will not condone the abuse of animals. Their personal philosophy and economic interest in their business will not tolerate abuse of animals. The requirement of H.R. 84 that the Secretary of Agriculture or his representative establish guidelines for proper diet and husbandry of special-fed veal calves is unnecessary. The best regulator are the producers themselves--as was demonstrated by Gary Wright and his experience in Pennsylvania, which you will hear about today.

Feed companies and universities have conducted extensive research into the proper nutrition as pertains to special-fed veal calves. The AVA has published guidelines relative to the proper management of veal calves. As proposed, the Secretary of Agriculture, and/or representative would make inspections of the facilities and provide training and educational programs for people in the production of veal. All this is unnecessary, as it is repetitive of present day market practices. In addition this involvement would be extremely expensive to the taxpayer of America.

V. Loose Housing Experience in the U.S. Veal Industry

Somehow the impression is widely held that the veal industry in the U.S. has never tried loose housing, refuses to test that husbandry system and rejects any call to do so. This is simply not the case. Let me give you my personal experience as a professional nutritionist and marketer:

In the early 1980s, there was an effort, brought by manufacturers and American representatives of European automated feeding systems, to get producers to use loose housing, meaning pens holding, on average, 20 calves with 10 sq. ft.-plus per calf. This production system was touted to part and full-time producers as a labor saving system.

Over the course of two years, several hundred producers--from small part-time farmers to the largest producers--tried the system. As with any innovation tried by livestock producers, experience was the arbiter of industry acceptance. However, this loose housing system simply did not catch on. Among the most common reasons for rejecting the system were:

--Too labor intensive;
--Less than expected calf performance;

--Increase in calf disease;
--Uneven calf development, and
--Over-all, more expensive, with no identifiable benefit to the welfare of the animal.

The machine generally did what it was touted to do in so far as delivering feed. What brought on the rejection by producers of this loose housing experiment was the inability to control the behavior of the calves and to maintain the calves in such a way as to promote the welfare of the animal while running a profitable operation. Farmers had to overcome bullying of smaller animals by the larger, urine drinking, inappropriate suckling, disease transfer, and the inability to monitor individual calf health.

AFIA would be the last to contend that loose housing cannot be done succcessfuly. It is being done by about 10% of the nation's producers; but the reality is that it is generally more expensive, it is more labor intensive and the performance of the animal is generally uneven. Hence, there is no evidence of improved welfare. The point is this: Both systems have their place, based upon geography, farmer preference, calf type, climate, etc. To legislate one over the other is to jeopardize not only the animal, but the producer and his/her family.

In conclusion, my views and background in animal agriculture in conjunction with working with veal growers for 20 years cause me to have serious problems with H.R. 84. This bill is unnecessary. Veal growers are doing an admirable job of providing the consumer with a healthy, wholesome product they demand. The bill is cumbersome and inefficient for the American veal producer. Their very livelihood is jeopardized by the components of this bill.

Congress should join with industry in providing the funding necessary to examine the important aspects of animal care addressed in this bill. It is not the intent of the legislation that is worrisome; it is the fact that emotion and perception have once again pushed science and producer experience out of the discussion. Congress should re-establish these priorities.

It is an admittedly emotional issue, but Congress cannot legislate in such a broad manner based upon emotion or to put some grease to the squeaky wheel.

Thank you for your attention and I will glady answer any questions you might have.

nmpf

national milk producers federation

1840 Wilson Blvd., Arlington, VA 22201
(703) 243-6111

James C. Barr, CAE
Chief Executive Officer

STATEMENT OF

MR. BILL BASSETT
BASSETT'S DAIRY FARM MONTICELLO, FLORIDA

BEFORE

THE HOUSE AGRICULTURE SUBCOMMITTEE ON LIVESTOCK, DAIRY AND POULTRY AND HOUSE AGRICULTURE SUBCOMMITTEE ON DEPRATMENT OPERATIONS, RESEARCH AND FOREIGN AGRICULTURE

REGARDING

H.R. 84, THE VEAL CALF PROTECTION ACT

JUNE 6, 1989

The National Milk Producers Federation is a national farm commodity organization representing virtually all of the dairy farmer cooperatives and their dairy farmer members who serve this nation by producing and marketing milk in every state in the Union.

Since its inception in 1916, the Federation has actively participated in the development of dairy programs which are a part of a total system of agricultural law and policy which can appropriately be termed a national food policy.

The policies of the Federation are determined by its membership on a basis that assures participation from across the nation. The policy positions expressed by NMPF are thus the only nationwide expression of dairy farmers and their cooperatives on national public policy.

Good afternoon Mr. Chairman and Members of the Committee. I am Bill Bassett, sole proprietor and manager of Bassett's Dairy Farm in Monticello, Florida. I am testifying today as a dairy farmer on behalf of the Florida Dairy Farmers' Association, and as a member of the National Milk Producers Federation.

The National Milk Producers Federation is the national farm commodity organization which represents dairy farmers and the dairy cooperative marketing associations they own and operate throughout the United States.

The bulk of the nation's milk supply is marketed through dairy cooperative marketing associations that farmers have developed to represent them in the market. The marketing activities of these associations range from bargaining for price and other conditions of sale of bulk fluid milk to the production of finished dairy products and the distribution and retail sale of such products to consumers. Virtually every dairy product that is produced in any substantial quantity in the United States is included in the product mix of the cooperatives represented by the Federation.

The Federation provides the vehicle through which dairy farmers and their cooperative marketing associations formulate policy on national issues which affect their ability to produce and market milk and dairy products. The Federation and its membership seek to establish conditions under which farmers can join together to market their products in stable markets at prices which are reasonable both to producers and consumers.

Since its founding in 1916, the Federation has worked with the Congress and the executive agencies in the United States to secure the adoption of laws and the implementation of policies to further these basic goals. On behalf of our members we address issues ranging from farm credit, income support programs, and agricultural research to nutritional assistance, food safety and quality, consumer awareness, and international trade.

NMPF's policies are established by our members on a basis which assures participation from across the nation. The policy views advocated by the Federation are, therefore, the only nationwide expression of dairy farmers and their cooperatives on national public policy.

I want to make it very clear to the Committee that this legislation, HR 84, is not necessary. It is based on false perceptions and inaccurate representations of animal agriculture. Raising strong, healthy calves is the first step in my business of dairying. Raising healthy calves is a job I do well, and in which I take great pride. Anyone who does otherwise is simply not practicing professional animal husbandry.

This legislation takes a very negative approach of burdening all farmers with regulation and requirements, while common sense and simple economics work quite effectively to prevent abuse or neglect of farm animals.

The apparent justification for this bill is that farmers are treating their calves so poorly that a federal mandate is needed to correct the situation. That, Mr. Chairman, simply is not true.

There is only one way for a farmer to make money in the livestock industry. That way is to produce healthy animals. The faster and stronger a farmer's animals grow; the more likely the farmer will make a profit when he sells the animal or its produce.

Bassett's Dairy Farm is a third-generation family dairy farm. We milk 1,600 cows twice a day taking about 18 hours. We also raise all our own replacement calves, another 1,600 animals, and farm 2,800 acres of land requiring a total of 45 employees.

At Bassett's Dairy, we have been raising replacements since the dairy began in 1921. It requires six people to efficiently operate our 1,600 head replacement program. The replacement manager devotes 88% of his time to the program and 12% of his time to the dairy operation. Two additional employees devote 15% of their time in areas other than the replacement program. This equates to approximately 5 1/2 full-time employees involved in the replacement program. That's 5 1/2 full-time employees whose only job is to raise healthy replacements.

Growth and health of young stock is paramount to the success of our dairy farm. It is so important we have instituted an employee calf bonus program. The employees earn extra income for each calf raised successfully to breeding age each year. Likewise, we deduct money from the employees' calf bonus for each calf that dies or is culled any time before breeding.

This has been a successful mechanism for increasing and emphasizing the importance of proper care of calves on our farm. I wanted to share this example with the Committee to illustrate the importance that dairy farmers like me place on the proper care of our calves.

We raise our calves on a very strict program of proper nutrition and vaccination with great care and attention to detail. To some, this may even sound somewhat regimented, because we place such a high priority on the health and well being of our animals. However, successful and profitable dairying today demands farmers give their calves such high priority. And again, exemplifies the needlessness of this bill.

HR 84 seeks to attack all producers, as though they must be told how to care for calves. I disagree strongly with this premise and simply point out that growing healthy calves is exactly what successful dairy farmers do. Growing healthy calves is an inextricable part of our job.

I think it is important that the Committee, and all the Congress, know how very seriously we approach proper health care of our young stock, so you may understand just how unnecessary these legislative calf raising requirements are. Mr. Bennett's bill would effect me as a dairy farmer nearly as much as a veal producer. It is difficult enough to make money in the dairy business these days; improper management and neglect of young stock would only reduce if not completely eliminate profitability on our farm.

The public should understand there is no room for complacency in raising livestock. Anyone who neglects even the smallest of details is not going to be profitable.

Adopting any practice that places stress on animals is counter-productive. I can guarantee you, if farmers provide a stressful environment for their livestock, they will not be in business very long.

The healthful calf rearing practices employed on our farm, like those across the nation, are the recognized industry standards. Developing these techniques required countless hours of research by our land grant universities, and practice by the farmers before us. All of this is done for the single goal of maximizing the animal's performance. By legislating that farmers follow certain space and feeding requirements we are ignoring the educational infrastructure that allows farmers to naturally adopt the individual methods which work best on their operation.

We have a very successful system in place. I can tell you exactly what it costs to raise a calf on our farm. And I can break that cost down for our four different age groups and separate out for you the overhead expenses. If a better way of raising calves is developed, you can bet I will adopt it.

What this legislation does is require farmers who raise calves to follow certain prescribed methods. Where this legislation is wrong is in assuming that this can be done. What may be the best way to raise calves today, may not be the best way tomorrow.

However, farmers will know if a better way comes along. And farmers will adopt the new and better ways of producing calves because they are always searching for better methods. Twenty years ago, you never saw a calf hutch on a dairy farm. Today calf hutches are the norm, simply because on many farms calves perform better in hutches and therefore the farmer uses them.

American agriculture has been able to lead the world because of the successful relationship that has developed between agricultural researchers and the farmers. Farmers are able to implement the latest university developments through the assistance of the Cooperative Extension Service.

To think that this Committee is considering legislation that is going to put this successful relationship out-to-pasture is disheartening. To think this Committee is considering legislation that is not only unnecessary, but would drive a lot of good farmers out of business, and cost me more money as a tax-payer, is disturbing.

If the Committee would like to improve the animal husbandry practices and conditions of calves on America's farms; you would be much farther ahead to appropriate more dollars for research and education at the universities and through the USDA, than to pass this needless legislation.

NATIONAL
CATTLEMEN'S
ASSOCIATION

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Testimony on Behalf of the

NATIONAL CATTLEMEN'S ASSOCIATION

related to

H.R. 84
ANIMAL PRODUCTION PRACTICES

before the

Subcommittee on Livestock, Dairy and Poultry
of the
House Agriculture Committee

United States House of Representatives

submitted by

Connie Greig, Chairman
Estherville, Iowa

Animal Care Subcommittee
of the
ANIMAL HEALTH & INSPECTION COMMITTEE

Tuesday, June 6, 1989

The National Cattlemen's Association is the national spokesman for all segments of the beef cattle industry--including cattle breeders, producers and feeders. The NCA represents approximately 230,000 cattlemen. Membership includes individual members as well as 47 affiliated state cattle associations and 24 national breed associations.

My name is Connie Greig, I am a cattle producer from Estherville, Iowa and Chairman of NCA's Animal Care subcommittee. Thank you for the opportunity to testify today.

The National Cattlemen's Association opposes H.R. 84. The bill is an unnecessary, ill conceived, and inappropriate broad first step toward federal regulation of the production practices of animal agriculture.

Livestock producers in the beef, dairy, and veal industries are responsible and humane caretakers of their animals. We have been, and continue to be the original animal welfarists. We would not be in this business if we did not have a profound respect and affection for our animals. We care for them and they care for us. They provide us with our livelihood. Beef, dairy, and veal production is based on sound husbandry practices developed with the help of animal scientists and veterinarians.

We resent this well-meaning but misguided attempt to regulate production practices.

As is the case in all industries, there is a minute percentage of bad apples and by that I mean those few who act irresponsible and abusively. We don't condone, nor will we tolerate the actions of the few who abuse or mistreat their animals. All states have laws dealing with the humane care and mistreatment of animals and we in the beef cattle industry want them to be fully enforced. However, a federal law addressed to the one or two bad apples is unnecessary and a waste of government resources.

The Iowa Cattlemen's Association members have offered to care for animals of owners who, for one reason or another, can no longer adequately care for them. We do not want to see farm animals abused or go unattended. The bad publicity that is generated from the few who mistreat their animals is a black eye for our entire industry.

H.R. 84, if enacted, could have a substantial impact on the agricultural community well beyond veal producers. The definitions in Section 6 of the bill are so broad they could be interpreted to include all calves under the age of nine months. The some 40 million beef calves born last year are not veal calves. Yet, H.R. 84 defines a veal calf so broadly that all the provisions in the legislation could apply to the beef cow calf production as well as anyone who owns, sells, purchases, or transports even a single bovine animal under the age of nine months. This incorrectly broad definition also could extend the inspection authority for USDA to all farms and ranches with any cows and calves. Section 3 of the bill would impose dietary requirements for liquid and solid feed on all calves. This is grossly inappropriate for the beef cattle industry where calves remain with their mothers until weaned at six to eight months of age.

-2-

The production practices of the beef cattle industry and the veal industry are entirely different. But we in the beef industry feel the veal industry has been victimized by sensationalized, inaccurate portrayals in the media. H.R. 84 reflects the media view and we strongly oppose changes in established production practices that are caused by emotion rather than solid research and practical agricultural experience.

Animal welfare and animal rights advocates have become increasingly more vocal in their efforts to influence public opinion. Cattlemen and cattlewomen used to think that we were immune to the concerns raised because we knew, in our minds, that we were taking good care of our animals. However, the confines of the city and the emotional images of the media have fostered confusion and misperception.

We now realize that well meaning but misinformed animal advocates are criticizing standard and sound husbandry practices throughout animal agriculture. Their criticism...based on emotion rather than facts or any direct experience with livestock production has begun to influence the public perception of our industries. If some of these people could see us on our farms and ranches taking care of our animals,....I think so many of their concerns would dissolve.

In order to contend with this issue in a positive way, all segments of the cattle industry...beef, dairy, and veal....came together several months ago and we developed a long range plan to communicate to the public our story, the accurate story of the way we raise our animals.

H.R. 84 is an issue for all agriculture. It is unwarranted, ineptly formulated, would have broad impact, and is a dangerous precedent. Our life is the care of our animals. They are our property and they are production animals, not companion animals or pets. They are raised for essential nutrients and countless byproducts that surround us everywhere.

We are proud of the care we give our animals and the products these animals provide the consumer. We look-forward to telling our story, the livestock producer's story, to more of the public so their confidence in our methods of animal care remains strong.

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION TO THE JOINT HOUSE AGRICULTURE SUBCOMMITTEE ON LIVESTOCK, DAIRY AND POULTRY AND THE HOUSE AGRICULTURE SUBCOMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH AND FOREIGN AGRICULTURE REGARDING H.R. 84, THE "VEAL CALF PROTECTION ACT"

Presented by Len Landwehr
Wisconsin Veal Farmer

June 6, 1989

Mr. Chairman and other members of the subcommittees, thank you for the opportunity to appear before you today to address H.R. 84. I am Len Landwehr, a veal farmer from DePere, Wisconsin. I operate a small family farm that has about 70 acres with facilities to house 625 veal calves at one time. I annually market about 1600 veal calves.

I present my testimony today on behalf of the American Farm Bureau Federation, the nation's largest general farm organization. The American Farm Bureau could also be considered among the largest animal welfare organizations since we promote proper handling, care and treatment of our livestock.

The American Farm Bureau would like to express its opposition to H.R. 84. Our opposition is based on the fact that the legislation is unnecessary, is founded on misguided emotional perceptions, has detrimental effects on veal, beef and dairy farmers, and results in increased cost to American taxpayers.

This legislation is totally unnecessary. The misguided emotional perception that led to this legislation is that farmers do not provide for their livestock's welfare and subject their animals to abuse. This is followed also by the misguided notion that only federal regulation of farms could correct such a problem. Neither of these perceptions are correct. Farmers care for their animals, nether tolerating nor condoning abuse, and go well beyond their role of humane stewards to provide for the animal's welfare. We work hard to reduce the animal stress that could result from improper diet or unhealthy environments. As a matter of fact, housing on veal farms is designed to provide for the health and welfare of the animals by affording protection from the elements and predators and provide for individual attention by the farmer for each animal. Diets are carefully calculated through scientific studies to provide for healthy, growing animals. Far fewer young calves die today from phenomena and other related diseases. No segment of society has more concern for the well-being of livestock than producers, and this is exemplified by the high levels of production and low mortality rates being achieved in modern livestock operations.

H.R. 84 would have a severe detrimental effect not only on veal producers but also on beef and dairy producers. The veal producer would suffer a major financial loss if forced to abandon present facilities and equipment simply to comply with regulations. At the same time, he would be forced to invest in new equipment if he hoped to remain in veal production. No compensation would be provided to the producer for this major financial loss.

Beef producers could be affected in several ways. First, the legislation does not provide a clear differential between a "veal" calf and a "beef" calf, which could result in USDA attempting to inspect all beef operations. Second, the beef producer could see increased cattle placements if these calves were not placed on veal farms and were instead placed in feed lots to be fed to much higher weights. This would result in lower beef prices due to over-production and a substantial reduction in income for cow-calf farmers due to decreased demand for their calves. The dairy farmer would suffer losses of income due to the loss of the major market for dairy bull calves. All of these would result in not only veal farmers going out of business but also financially stress to dairy and beef producers.

The provisions for education programs and for inspection of farms and markets will result in large government expenditures. This would come at a time when the federal government, and especially the USDA, is in a period of major budget constraints. If enacted and no additional funds were provided, as stated this contradicts what precedes it, then not only would this program be improperly implemented but other programs within USDA that truly have some need would suffer.

This legislation would also result in greater use of imported products that would not be subject to these requirements, higher consumer cost and increased conversion of farm land if farmers go out of business.

The American Farm Bureau and the livestock industry are continually working with scientists and other groups to provide for and improve the care, feeding and handling of livestock. The new scientific information that results in greater care and improved feeding of our livestock is carefully and quickly implemented by farmers. We farmers are the ultimate animal welfare advocates since our very livelihood is directly related to our animal's welfare.

Mr. Chairman, I thank you and the other subcommittee members for allowing me to present testimony on this important issue. Our comments are designed to dispel some of the misconceptions related to animal agriculture. We urge your opposition to H.R. 84.

NATIONAL
FARMERS
UNION

TESTIMONY OF

THE NATIONAL FARMERS UNION

Before the

Subcommittee on Livestock, dairy, And Poultry
House Committee on Agriculture

June 6, 1989

Thank you Mr. Chairman. My name is Howard Lyman, and I am here this morning on behalf of the National Farmers Union. We are a general purpose farm organization, with nearly 300,000 member families in 26 different states. I appreciate the opportunity to be here this morning to share Farmers Union's concerns in the area of raising calves for veal.

I was raised on a diversified dairy farm in Montana. We raised all of the calves born into the herd either for replacements or slaughter. I was involved in animal feeding for over thirty years. The early part of my experience was with calves and we fed several thousand.

The problems of feeding veal calves is very different in management technics than those called for in feeding larger size cattle. The care needed for veal calves is the most demanding of all livestock endeavors I've ever been involved in during those thirty years.

This bill, H.R. 84, deals with three main points: the length of the pen, the amount of iron in the animals' diet, and a process for inspection. In our opinion, the first two are common sense and should cause no problem for the vast majority of livestock producers who strive for healthy animals. The question of inspection, on the other hand, is very serious and should be handled with the same careful consideration given to the issue of searching a personal residence.

Inspections should be done only by approved officials and they should be scheduled in advance. In addition, the standards which producers would have to meet to pass an inspection should be clear and well-publicized. A livestock producer should have a reasonable opportunity to fix minor problems before subjecting himself to an inspection that could wipe out a lifetime of effort and a very costly investment in production facilities.

The calves going into veal operations today will cost up to $200, and at that price even small problems are very costly. Veal producers must be an exceptional managers or they will not survive in today's market. The family farmer in business today would be the last person to abuse an expensive animal that provides the income to sustain his family. The care given most animals on most family farms today would easily pass the standards contained in this bill. The future of these animals will not be changed by the legislation contained in H.R. 84.

The larger problem in this issue is to separate fact from fiction. The amount of scientific data known in relation to the emotional misinformation is very small. When the number of consumers outweighs the producers by such a wide margin there needs to be hard data on which to legislate the future of an industry. We would like to see an in-depth study into the mental health effects of various types of restraint and feeding methods so that producers can plan responsible operations with some certainty.

When legislation is considered, it is the hope of the industry that Congress remembers that producers today have tremendous resources tied up in production facilities, and that proposed changes will be reviewed with factual criteria rather than emotion. One of those criteria should be the cost of the end product to the consumer, who will ultimately pay for a new regulatory scheme that increases the costs of production. Our members are concerned that we provide the best possible product into the market at a fair price. We will continue to provide what the consumer wants, and provide it in compliance with the law. But, we urge Members of Congress to bear in mind what large increases in consumer costs, and corresponding reductions in demand, will do to family-sized producers. The ultimate effect could be to drive those producers who are least responsible for poor animal husbandry practices out of the business.

We know the future will be very different from the past, and what we want is a future that is predictable and achievable for the producers that are in business today.

Thank you, Mr. Chairman. I would be happy to answer any questions you might have.

Statement of
Ardath DeWall
with respect to
H.R. 84, The Veal Calf Protection Act
before the
Subcommittee on Livestock, Dairy and Poultry of the Committee on Agriculture
UNITED STATES HOUSE OF REPRESENTATIVES

June 6, 1989

Ardath DeWall
11841 N. Mt. Vernon Rd
Shannon, Illinois 61068

815/864-2561

I am Ardath DeWall of Shannon, Illinois. I appreciate this opportunity to comment on H.R. 84, the Veal Calf Protection Act.

The DeWall family--my husband, myself and our two sons--own and operate a 220 acre dairy farm at Shannon. Our oldest son is a graduate of the University of Wisconsin and an active partner in the operation. Our youngest is presently a student at the University of Wisconsin and involved in the farm operations as his studies permit. This is totally a family operation with outside labor used only during peak seasons such as haying.

In addition to my responsibilities on the farm, I am a member of the Board of Directors of the Morning Glory Farms Region of Associated Milk Producers, Inc. I have served two terms as President of our Region's AMPI Women and am active in American AgriWomen. I am currently President of the Agricultural Women's Leadership Network and a past member of the National Dairy Promotion and Research Board.

At the outset, I would like to make it clear that as a dairy farmer, my first concern is the welfare of our livestock. Our primary economic asset is our 60 cow herd of registered Holstein milk cows and the associated replacement stock which represents our future in the business. Over the years we have made a large financial investment and devoted substantial time and effort to improving the quality of the herd.

Along with that is the constant attention to overall herd health. This takes many forms. The facilities must be clean and dry. The feed must be of high quality and free of residues. You have to be constantly on the alert for illness. You do all this as a producer because it is essential to your livelihood. There is a more basic reason for most of us, I believe. We are in the dairy business--we are livestock producers--because we enjoy working with animals and delight in a sound, healthy, animal.

The legislation before the Subcommittee today would direct the Secretary of Agriculture to develop standards of nutrition and management for the production of veal. Along with that the Secretary would be responsible for an inspection system to assure adherence to the prescribed rules.

The legislation is of concern to dairy farmers as veal production represents a substantial market for many of the calves not retained as replacement animals. More basic is the concern that this can become an effort to assign to a government agency responsibility for determining the type and style of management that may be used in animal agriculture. It is easy to envision extending the concept in the legislation to require the Secretary to prescribe the manner in which dairy cattle will be confined, how they will be fed, the type of milking system to be used and to dictate other features of a management system.

A wide range of management systems are used on today's dairy farms. They are used because the have been found to fit the needs of the operator, they improve productivity, or simply because of personal preference. In our own situation, our calf raising operation is a major part of the enterprise. Calves are raised in a nursery environment in individual pens and hutches. We have found this the best means of maintaining cleanliness of the calves. Each individual can be observed and individual care provided as needed much better than if the calves are run together in a group. This latter point is important. Each animal is an individual. You don't deal with a "herd" of cows. You care for each one individually.

Our milk cows are handled in a stanchion barn for many of the same reasons. This affords an opportunity for individual attention, gives us a better handle on herd health, and allows closer attention to nutrition needs and other aspects of management.

With all due respect to the Secretary and his personnel, efforts to dictate management styles, feeding systems or other operating techniques for the individual operator is perhaps the best way to set agriculture back a good deal and to raise consumer food costs in the process.

We have been able to dramatically increase productivity in the dairy industry because the individual producer has been free to experiment with new technology, to try new management techniques. The result is a national dairy herd that produced 14,200 pounds of milk per cow last year compared with about 5,300 pounds in 1950. At the same time, the real cost of milk and dairy products has declined sharply. In 1950 the average worker needed 16.1 minutes of work to buy a half gallon of milk. In 1987, 6.9 minutes did the job. A pound of American cheese cost 21.6 minutes of labor in 1950 but only 16.3 minutes in 1987. Across the board, the cost of dairy products to the consumer today represent a real food bargain.

For those concerned about production conditions on the dairy farm, I can assure you we are inspected regularly with respect to sanitation of the production facility, cleanliness of the animals, and related production conditions. Herd health is a constant concern of public health authorities where our milk is marketed. The milk itself is routinely sampled for purity.

This brings us back to where I started. In order for my family to remain in the dairy business, we have to maintain the health and welfare of our herd. The term "Milk From Contented Cows" is more than a clever advertising slogan. The only way to maintain a high producing, efficient dairy herd is to use all the management know how at your command to make certain they are fed right and otherwise cared for in a sound manner.

TESTIMONY OF

JACK FLEISHMAN
PRESIDENT, BERLINER & MARX
(ON BEHALF OF THE AMERICAN MEAT INSTITUTE)

THANK YOU MR. CHAIRMAN. MY NAME IS JACK FLEISHMAN, PRESIDENT OF BERLINER & MARX. OUR COMPANY SLAUGHTERS AND PROCESSES VEAL FOR THE DOMESTIC SUPERMARKET AND RESTAURANT TRADE, AND EXPORTS TO THE FAR EAST AND EUROPE. OUR OPERATIONS ARE LOCATED IN WISCONSIN, INDIANA AND NEW YORK.

TODAY, I AM REPRESENTING THE AMERICAN MEAT INSTITUTE, THE NATIONAL TRADE ASSOCIATION FOR MEAT PACKERS AND PROCESSORS. AMI MEMBERS SLAUGHTER AND PROCESS OVER 80 PERCENT OF ALL MEAT PRODUCTS PRODUCED IN THE UNITED STATES. A NUMBER OF AMI MEMBERS CONSIST OF VEAL PACKERS, PROCESSORS AND DISTRIBUTORS.

THE AMERICAN MEAT INSTITUTE VIEWS H.R.84 -- THE VEAL CALF PROTECTION ACT -- AS UNNECESSARY AND OF SUCH A RESTRICTIVE NATURE THAT IT COULD VIRTUALLY DESTROY TODAY'S FORMULA FED VEAL CALF INDUSTRY AND, IN THE PROCESS, SEVERELY DISRUPT THE LIVELIHOODS OF THE THOUSANDS OF PEOPLE ASSOCIATED WITH IT.

IF THIS HAPPENS, WE -- THE NATION'S VEAL PACKERS AND PROCESSORS -- WOULD FACE THE PROSPECT OF SHRINKING SUPPLIES AND HIGHER PROCUREMENT COSTS. CERTAINLY, WE WOULD NO LONGER BE ABLE TO SUPPLY THE AMERICAN PUBLIC A WHOLESOME, NUTRITIOUS PRODUCT AT THE MOST FAVORABLE PRICE. THE QUESTION IS: SHOULD CONGRESS PASS A LAW THAT WOULD CURTAIL PRODUCTION OF AND GREATLY RAISE CONSUMER PRICES FOR VEAL? I BELIEVE THAT WOULD BE A STEP BACKWARD.

IN ADDITION, THIS BILL WOULD HAVE A CRIPPLING EFFECT ON THE DAIRY INDUSTRY. DAIRYMEN, ALREADY FACING FINANCIAL PROBLEMS, WOULD FACE DECREASING REVENUES FROM THE MORE THAN 1 MILLION CALVES THAT NOW "GO TO FEED" AND FROM THE MILLIONS OF POUNDS OF WHEY THEY ARE FED.

THERE IS ALSO ANOTHER DANGER. THE MANDATORY PROVISIONS OF THIS BILL THREATENS ANIMAL AGRICULTURE IN GENERAL. GIVING GOVERNMENT THE RIGHT TO DICTATE HOW AMERICAN PRODUCERS RAISE VEAL CALVES WOULD SET A DANGEROUS PRECEDENT THAT COULD QUICKLY ESCALATE TO ALL ANIMAL AGRICULTURE PRODUCTION. IVORY TOWER THEORIES ARE A LONG WAY FROM PRACTICAL PRODUCTION TECHNIQUES.

AMI'S LONG STANDING POLICY IS THAT ALL LIVESTOCK PURCHASED BY OUR MEMBERS SHOULD BE TREATED AND HANDLED IN A HUMANE MANNER. IT IS IN OUR INDUSTRY'S BEST INTEREST, AND A NECESSARY PART OF MAINTAINING OUR ECONOMIC VIABILITY, TO PURCHASE HEALTHY, WELL-CARED-FOR ANIMALS. TO DO OTHERWISE WOULD SEVERELY RESTRICT OUR ABILITY TO COMPETE IN THE MARKETPLACE WITH OTHER HIGH QUALITY PROTEIN FOODS THAT ARE AVAILABLE TO TODAY'S CONSUMER.

BERLINER & MARX AND OTHER VEAL SLAUGHTERERS SET FORTH BUYING PRACTICES THAT EXPECT ALL VEAL CALVES TO BE RAISED IN

ACCORDANCE WITH ESTABLISHED PRODUCTION GUIDELINES AND APPLICABLE LAWS. AMI WORKED COOPERATIVELY WITH THE AMERICAN VEAL ASSOCIATION TO DEVELOP THE PUBLICATION: GUIDELINES FOR THE CARE AND PRODUCTION OF MILK FED VEAL CALVES.

AMI ENDORSES THESE GUIDELINES AS WELL AS THE AMERICAN VETERINARY MEDICAL ASSOCIATION'S GUIDE FOR VEAL CALF CARE AND PRODUCTION. THESE PRODUCER DEVELOPED PROGRAMS PROVIDE HUMANE TREATMENT FOR VEAL CALVES AND ASSURE THE PUBLIC A SAFE AND WHOLESOME PRODUCT. THE PROPOSED MANDATORY LEGISLATION WOULD PROVIDE NO ADDITIONAL BENEFITS.

ALL PACKERS OPERATE UNDER THE HUMANE SLAUGHTER ACT AND ARE REGULATED BY THE FOOD SAFETY AND INSPECTION SERVICE. WE ARE REQUIRED TO TREAT ALL ANIMALS COMING INTO FEDERALLY INSPECTED FACILITIES IN A HUMANE MANNER. SIMPLY STATED, OUR INDUSTRY LIKE THE VAST MAJORITY OF ANIMAL PRODUCERS IS COMMITTED BOTH LEGALLY AND ETHICALLY TO THE HUMANE WELFARE OF ANIMALS WE PURCHASE.

BERLINER & MARX ACTIVELY ASSISTS PRODUCERS IN RAISING VEAL CALVES BY ACCEPTED INDUSTRY PRACTICES. WE VISIT GROWERS ON A REGULAR BASIS TO INSPECT THEIR PRACTICES BOTH IN THE TREATMENT AND CARE OF THE CALVES.

BERLINER & MARX KEEPS A FULL AND DETAILED WRITTEN REPORT OF SUCH VISITS ON FILE (SAMPLE COPY ATTACHED). ANY GROWERS FOUND TO BE CRUEL, ABUSIVE OR NEGLIGENT IN THEIR PRODUCTION PRACTICES ARE BARRED FROM DOING BUSINESS WITH OUR COMPANY.

IN SUMMARY, THE AMERICAN MEAT INSTITUTE AND BERLINER & MARX ARE COMMITTED TO THE HUMANE WELFARE OF VEAL CALVES. WE TAKE AN ACTIVE ROLE IN DEVELOPING GOOD VEAL CALF RAISING PRACTICES AND WORK CLOSELY WITH GROWERS, FEED COMPANIES AND VETERINARIANS TO INSURE THE ENFORCEMENT OF THESE PRINCIPLES THROUGH MEMBER BUYING PRACTICES.

MR. CHAIRMAN, THE BOTTOM LINE OF H.R.84 IS SIMPLY THIS: IT WOULD GREATLY RESTRICT VEAL PRODUCTION WITHOUT ANY TANGIBLE BENEFITS. WE URGE YOU AND YOUR COLLEAGUES TO REJECT FURTHER CONSIDERATION OF THIS UNNECESSARY LEGISLATION.

THANK YOU FOR THE OPPORTUNITY TO PRESENT OUR VIEWS ON THE VEAL CALF PROTECTION ACT. I'LL BE HAPPY TO ANSWER YOUR QUESTIONS.

(Attachment follows:)

FROM BERLINER MARX N.Y. 6. 5.1989 5:23

VEAL GROWER REPORT

DATE:____________

GROWER:__________

FACILITY:_________

OUTSIDE APPEAEANCE -PREMISES

DRIVEWAY AC___ UNAC____________

BUILDINGS AC___ UNAC____________

YARD AC___ UNAC____________

OTHER COMMENTS____________________

INTERIOR APPEARANCE

FEED ROOM

HOUSEKEEPING AC___ UNAC____________

LIGHTING AC___ UNAC____________

OTHER COMMENTS____________________

CALF ROOM

HOUSEKEEPING AC___ UNAC____________

FLOORS AC___ UNAC____________

CRATES AC___ UNAC____________

LIGHTING AC___ UNAC____________

OVERALL AC___ UNAC____________

OTHER COMMENTS____________________

HUMANE TREATMENT

CRATES

GOOD REPAIR AC___ UNAC____________

ADEQUATE SIZE AC___ UNAC____________

OTHER COMMENTS____________________

TETHER CONDITIONS

AC___ UNAC____________

OTHER COMMENTS____________________

VENTILATION

AIR MOVEMENT AC___ UNAC____________

ODORS AC___ UNAC____________

OTHER COMMENTS____________________

CALF CONDITION

SKINS

CLEANLINESS AC___ UNAC____________

PARASITES AC___ UNAC____________

OVERALL AC___ UNAC____________

OTHER COMMENTS____________________

ADDITIONAL REMARKS____________________

Statement of
Sandy Greiner

My name is Sandy Greiner, my husband and I own and operate an enviornmentally controlled farrow to finish hog operation in Southeast Iowa, near Keota.

I am President-Elect of American Agri-Women, a coalition of farm, ranch, and agribusinesswomen. American Agri-Women was established in 1974 by women seeing the need to tell the true story of American agriculture.

Thank you very much for allowing me the opportunity to offer this testimony today. I am testifying on behalf of American Agri-Women.

Animal Rights is an issue of high priority with the members of A.A.W. Several aspect of H.R. 84 are especially disturbing to us.

We feel that legislating the size of pens is an unnecessary step. Farmers and ranchers have always had the well being and comfort of all their livestock at heart.

Research has shown that negative stress impossed on animals results in a slower growth rate. It would be economic sucide to expose animals to unlimited stress.

We are also concerned about establishing any further legislative guidelines on feeding livestock. Livestock diets are currently more highly restricted than human diets. Additional regulations would impose unnecessary restraints on producers.

Farmers and Ranchers were the original Animal Welfare advocates. As you know, the midwestern climate is one of extremes. I could speak volumes, citing examples of heroic efforts by livestock producers to relieve their animals from the stresses of extreme weather conditions.

Farmers and ranchers often risk their own lives to reach livestock stranded by winter blizzards, in order to provide their stock with feed and water.

As we speak today, water supplies are getting low in Southeastern Iowa. In many instances there is water available for livestock sustinance, but not to maintain a comfort level. Many producers are reducing herd sizes in order to insure that their remaining livestock enjoy a more abundant water supply. I think this example demonstrates that these farmers are more concerned with the comfort and well being of their herds, rather than the almighty dollar.

We in the livestock industry have the ability to police ourselves, through peer pressure, rather than having additional restrictions placed upon us.

Many examples can be sited of a livestock farmer reporting animal abuse by a neighbor. American Agri-Women applaude those farmers and ranchers with the courage to report to the proper authorities, animal abuses that are occuring in a neighbors operation.

As Christians, we understand our responsibilities to protect our livestock herds from undue stress.

Passage of H.R. 84 could set a precedent for the production of other species. Carried to extremes, the passage of this bill could lead to unnecessarily high food costs to the consumer.

In conclusion, American Agri-Women opposes H.R. 84. We offer our assistance to this committee to ensure that all species of livestock continue to receive the finest in humane treatment.

We believe that through the efforts of this subcommittee and America's farmers and ranchers, we have sound methods in raising livestock, that are not only humane, but also provide a healthy and wholesome diet for the consumer.

Again, thank you for this opportunity to present our views. I would be happy to answer any questions.

June 5, 1989

Sleeping Cat Farm
Ron & Mindy Desens
Rt. 3 Box 229
Litchfield, MN 55355

Sleeping Cat Farm is a family operation: 200 acres of corn, beans, oats, wheat and alfalfa; 100 acres of woods and pasture.

We've implemented a number of conservation practices on the farm since taking over in 1980, including grassed waterways, contour strips, and ridge-tillage (a farming method that leaves soil-protecting residue), and we've put more of the farm into pasture, hay and forest. In 1986 we were chosen Conservation Farmers of the Year for our county.

Also since 1986, we've used no commercial fertilizers or pesticides. Our weed-control includes rotary hoeing, cultivation and rotation; our fertility management consists of a legume rotation and manure.

We started raising what we called "drug free beef" after reading Orville Schells's book, Modern Meat. Our production methods are simple: pasture and some ground ear corn in the summer, hay and ground ear corn in the winter. They have access to a mineral salt block yearround, and in the winter are given a non-medicated vitamin/mineral supplement with their feed. In our brochures, we define "drug free" to mean "No feed-grade antibiotics, no hormone implants, no additives designed to make the cattle grow faster.

We are not promoting our produce as "organic" yet, because the Minnesota law requires it be raised with feed grown on land that's been chemical free for three years. By next year, we will be able to use the term on some of our livestock (the 1989 grain crop is organic).

We retail all our beef, between 80 and 100 head annually, by the package and by quarters through farmers' markets.

Two years ago we became familiar with the concept of "free-range veal," and decided to experiment with it on a small scale. We had no formal standards to emulate, so devised our own (which, incidentally, are still evolving).

OUR PRODUCTION METHODS:

We buy dairy-beef (bull calves from dairy breeds) from neighboring dairy farmers. We insist that they have been fed a minimum of several days colostrom before we take them. For the first several weeks up to two months, we house them in 4-ft. by 8-ft. calf hutches with an attached 16-ft. fences run. We will put calves in pairs when they come from the same farm; otherwise we prefer to keep them separate to minimize the transference of disease from calf to calf.

Note: For a time, we avoided the use of immunization shots, but now have changed our policy to include immunization for respiratory diseases. Because we're mixing calves from a number of different farms, there's a great potential for disease spread. (One calf may have antibodies for a specific "bug," while a neighboring farms calf does not, simply because that "bug" has never been present on that farm.)

Initially, we feed our calves fresh goat milk., Gradually, they're offered more feed choices, including a mixture of our own grains (supplemented with a non-medicated vitamin-mineral mix). In our experience, calves seem to do better if they're given some solid feeds at a fairly young age.

By the time they're two months old they're eating grain regularly in addition to the goat milk. They've also been grouped together by then in a fairly large pasture area with part of our barn as shelter. The number can vary, but their may be an average of six to eight calves in a half-acre lot. Future expansion plans on the farm would include large group shelters with permanent or portable pasture fence.

They continue to received some milk, as a supplement, almost daily.

Should a calf require treatment for disease (scours caused by bacteria, respiratory infections, etc.) we will use a federally-approved medication to treat it. That calf will not be butchered as "veal" if medication is required beyond two months of age, but instead will be kept to grow up with the beef heard and butchered at 12-14 month old.

They're butchered at between 16-20 weeks, at live weight of 300-325 pounds. Our processor is USDA inspected, and uses a captive-bolt gun on the "kill" floor. We bring the calves to the facility ourselves shortly before they're to be slaughtered, so they don't have to stand in holding areas with other livestock. They're led directly into the kill floor from our truck, a practice which seems to minimize stress on them . From our observation, the slaughter itself is painless and instantaneous.

At this point our net-return-to-labor is roughly $100 per calf.

WHY WE RAISE FREE-RANGE VEAL;

Because we retail our beef, we're in constant contact with our customers. There seems to be growing consumer awareness of (and resistance to) present-day confinement methods of veal, and we felt that we could offer an alternative product to those customers who wished to eat veal but would not buy the "milk fed Fancy" product available locally.

The response to our product has been very positive. Farmers often under estimate the power of the media to influence consumer demand. In the case of veal in particular, recent television and print coverage of "traditional" veal production methods has had a major impact on the awareness of mainstream consumers.

Not all people care where their food was raised, or how it was raised. But, the number of people who do continues to grow phenomenally. This new consumer consciousness is most obviously apparent in the recent mushrooming of demand for "organically raised" food, and it carries over into increased demand for meat raised without growth stimulants, and meat raised with a minimum of medication.

OUR PHILOSOPHY:

The best way-- and the way nature intended --for calves and other animals to be raised is to be kept with their mothers until they're naturally weaned.

This isn't the way of the dairy industry. Often, baby dairy calves are fed "milk replacement" even when they're on the farm with milk-producing cows. This is an economic decision on the part of the farmer, who sometimes feels he or she can make more money selling the fluid milk and substituting an imitative, often medicated product, as calf feed.

Our decision to raise milk goats was based on the knowledge that calves do better on fresh, whole milk, because goats are easier to raise (and milk by hand) than cows, we opted to try this. So far, this seems to be working well, on our small-scale operation. With efficient management of both the goats and the cattle, the practice should be expandable to a larger scale for greater efficiency.

With baby calves, prevention of disease is critical to the gain (and profitability) of the animal. All of our practices evolve with this thought in mind. We've experimented with different feeding methods, and will continue to experiment as we expand. Our goal is to continue to be profitable on a per-calf basis, but to increase the numbers of calves so as to increase out total net income.

Many veal producers, we feel, have bought into a system that because it's expensive, allows for little flexibility. To remain profitable and to justify the facility and equipment they must keep the numbers (of animals) high. When profit per "unit"--animal--is small, even small change can reduce that profit further. Even if a change could mean potentially more profitability, the risk factors (whether perceived or real) often preclude making the change.

Consumer demand trends are difficult to quantify. But if "gut feeling" is a valid concept, we feel that consumer preference away from confinement-produced livestock will continue to have a major, growing force in the market place. Many people will pay more for a "clean," relatively drug-fee product. Potentially, at least, their willingness to pay for it should help make the transition easier for the producer.

Our veal operation is so far just a small part of our overall operation and income (20 calves in 1988). We have done little to initiate a demand for our "free-range" veal, yet demand continues to grow, among individual customers and quantity-buyers, like restaurants and caterers.

Whitewater Farm
P.O. Box 99
New Sharon, ME 04955

May 29, 1989

Hon. Charles W. Stenholm
U.S. House of Representatives
Committee on Agriculture
Chairman, Subcommittee on Livestock, Dairy, and Poultry
Room 1301, Longworth House Office Building
Washington, DC 20515

Dear Rep. Stenholm:

I greatly appreciate the opportunity to speak to you and the other committee members concerning this important issue (HR 84). The following is a text of my remarks to be made before your subcommittee on June 7, 1989.

I have been a diversified livestock producer for the past fourteen years. I have successfully raised freezer pigs, Holstein replacement heifers, feeder cattle, draft horses, and Registered Polled Herefords. In addition, I have been raising veal calves since July 1988. Presently I have a contract with the Food Animal Concerns Trust, Chicago, to raise these calves for the Bread and Circus natural food stores in the Boston area.

Briefly I would like to explain my husbandry and health practices concerning these veal calves:

1) The calves are obtained directly from local dairy farmers.

2) Upon receipt, all calves are vaccinated for respiratory diseases and given a vitamin shot.

3) New arrivals are housed in a separate room for three to four days so that the calves can be acclimated and observed in the least stressful environment.

4) Calves are then placed in the first pen of five, in a group of 8 - 10 calves. They receive free choice, acidified milk replacer, hay, water, and a calf starter grain.

5) As the calves proceed through the pens at approximate four week intervals, the amount of grain, water, and hay available to them is increased, while the milk replacer is available but in diluted form.

6) At approximately 20 weeks the calves are sent to slaughter and marketed through the Bread and Circus stores. The dressed weight of these calves is approximately 200 lbs.

I would like to outline some important facts concerning my operation. The first area is housing. The calves are housed in a converted dairy barn - the dimensions being 60' X 32'. Each calf has approximately 39 sq. ft. of space based on eight calves per pen, plus an additional 126 sq. ft. of pasture/yard area. Extra pasture is also available.

The second area of concern is feed. The milk replacer is a quality, non-medicated partially acidified product dispensed through a self-feeding nipple. The calves are fed a commercial calf starter grain until 8 weeks, when it is mixed half and half with flaked corn. Each calf consumes approximately 10 lbs. of grain each day from 9 to 20 weeks of age. They have free access to hay, water, and also grass in summer.

The last area of concern is that of health. All drugs which are used are approved for cattle and administered only when needed, usually during the first four weeks. Detection of sick calves is fairly obvious with this system as they do not diplay normal patterns of behavior when sick. No drugs are administered during the last 6 weeks of feeding.

In conclusion, I strongly believe that this method of raising veal is a viable and humane alternative. We can provide a quality animal food product with minimal use of drugs and maintain the calves in a healthy environment.

My family and I extend an invitation to you to visit Maine and our farm. Thank you.

Respectfully submitted,

Russell E. Dodge

Russell E. Dodge, Jr.

June 1, 1989

TESTIMONY
HR 84, THE VEAL CALF PROTECTION ACT

Robert A. Brown
Pres., Food Animal Concerns Trust
PO Box 14599, Chicago, IL 60614

My name is Robert A. Brown and I would like first to thank you for holding hearings on a bill that is of concern to many consumers. Briefly my background is as follows. I hold degrees in biology from Harvard and Northwestern. I was Research Manager of the Institute for Research in Animal Behavior, a joint venture of Rockefeller University and the NY Zoological Society, and I was on the curatorial staff of the Bronx Zoo. Before founding FACT, I directed the largest private animal shelter in Illinois with a full service veterinary hospital under my supervision.

FACT sets husbandry standards for farm animals, but, unlike others that do so, we put the standards to work by contracting with farms and providing the farms with marketing assistance. We have farms now in IL, PA and ME. The value of all their product will approach $2 million per year during 1989.

Our demonstration project for veal is in ME. The way the calves are raised will be discussed in testimony by Russ Dodge Jr., a farmer who is in the FACT program. Because we know a great deal now about the veal business, I want to discuss the effects of HR 84 on producers.

To a great extent, producers of anemic veal are victims of the method. They are sold the system as a low labor technique for making a lot of money. When they get their first batch of calves, however, they find themselves in an all out struggle to keep them alive. Most importantly, they are caught in a vise between the producers of high cost anemic feeds and the processors who dock them if the veal color is not dead white. Sometimes they get docked when the color is in reality ok. They can't avoid the high cost feeds for fear of having all calves too pink. The prices they receive vary and lots of money can be lost.

HR 84 will not solve all the producers' problems, but it will help. By feeding solids as well as liquids, the total cost of feed will decline. By not going for anemia, there will be more flexibility in what is fed, and the producer will have some control over feed costs. The dead white meat now required will not be available and grading will be based more on conformation as in other meats. And, of course, the struggle to keep calves alive will be simplified because they will neither be anemic nor so closely confined.

I want to clear up a matter of confusion that has been introduced into this controversy by the feed companies, processors and their friends at ag schools who defend current methods. They say they tried group housing, and it didn't work. What they tried is an alternative system widely used in Europe for producing anemic veal. In this system the calves are housed in crowded indoor pens and fed anemic rations through a nipple. This system offers no clear cut advantages to producers, and we do not recommend it.

The fact is, anemic veal producers have not tried raising calves in conformance with HR 84, that is, giving them more room, iron and solid food. Nor could they attempt this with any assurance of success before passage of HR 84. They would be docked for color every time. That's why this bill should be passed.

Would it benefit every veal producer? No. Thousand crate operations will phase out. Some smaller producers with crates would not be willing or able to change. This is particularly true for the many employed rural people who have veal barns on the side because the crate is primarily a labor saving device. These part-time vealers have included teachers, truck drivers, plumbers, veterinarians, even airline pilots. Few people who have been farming all their lives have gone into crated veal production.

While some of these individuals would drop out, the attractiveness of veal production will vastly increase for the full-time farmer. It would become an ideal profit maker for participants in the whole herd dairy buyout program. It would make veal production a possibility for cow-calf operations in beef producing states such as Texas. What we are really talking about is taking veal production out of the intensive care ward and putting it back on the farm.

Passage of HR 84 would be of great benefit to the meat industry. We all know consumer confidence in the US meat supply is falling. These stressed calves are the most heavily drugged of all farm animals, and a big black mark on the safety of all meats could come from this small industry which accounts for at most 1.5 million calves per year.

May 31, 1989

U.S. House of Representatives
Committee on Agriculture
Subcommittee on Livestock, Dairy, and Poultry
Room 1301, Longworth House Office Building
Washington DC 20515

Dear Members of the Agriculture Subcommittee

We are very concerned about the impact Bill H. R. 84 will have on our business for two reasons. The first being that we are veal growers and this bill would put us out of business. It would force us to cut our production by two-thirds, which would not be possible, as we financially would not be able to meet our debts.

Our second reason for concern is the fact that Mr. Bennett introduced the bill based upon viewing "Misery on the Menu." Misery on the menu was partially filmed on our farm. We object to the bill being based on an inaccurate television story which was a sensationalized story to boost television ratings, instead of being based on scientific research and veal grower extensive experience in raising calves.

We have raised calves for ten years and run a family farm operation where our two small sons help us in the barn daily. We were raised on farms and took agriculture coarses in school. We rely on updated industry research and common sense in raising our calves in the most humanly, comfortable and productive way possible. We would not put a calf outside in our Wisconsin winter climate no matter what anyone says.

Mr. Steve Wilson, a reporter from KARE TV, Minneapolis, Minnesota, contacted us at the beginning of August 1986 about doing an educational story about "Life on a veal farm." He told us he had obtained our name from the packing plant where we sell our veal. The veal packing plant confirmed that and repeated that Mr. Wilson was planning on doing a story of the farm life aspect.

We should have known we were in trouble when Steve Wilson asked the difference between a bull and a heifer calf.

We, as veal growers, believe the mini-series was misleading, one-sided, incomplete, inaccurate and sensationalized.

We would like to explain some of the vivid images seen. First the calf straining against the chain. The scene is used repeatedly through out the series. The calf was in fact, scared and intimidated by the bright lights of the television camera and the camera man standing so close to him when everything is so new to the calf.

The calf depicted as being crippled at the time for marketing was in actuality being inquistive about the sudden new territory. It's leg is merely at an awkward position. It is never stated that this calf has had 16 weeks in his designated space and was acclimated to his own pen. The calf was merely unsure of which direction it was expected to go and usually smell or sniff where they're going first.

The final segment showed a room full of empty chairs and listed the names of organizations and corporations that declined to be present. We wereuncertain about attending and finally decided not to, due to the experiences we had with the final stages of the series production. After viewing the last segment, we believe we made the right decision in not attending.

The editing used terminology that led viewers to a negative impression even before viewing the series. The terminology was very negative and biased against the veal growers. Such expressions included: "What you don't know could ruin your appetite", "Astonishing practices", "Harsh treatment", "Meat that may not be fit to eat", "Environment that breeds death and disease", "Basically not a safe product", "Miserable conditions", not to mention the very title of the series, "Misery on the Menu." He did not mention once the high nutritional value of veal. He also omitted the costs of veal production, the basic animal husbandry involved and the industries explanation of the system. Steve Wilson was very selective with his choice of words to make people who viewed this series question our ability to care for these animals.

We filed a complaint against Steve Wilson and KARE TV, Minneapolis, Minnesota with the Minnesota News Council. We didn't have a legal recourse. Every statement made in the series was implied.

We are proud of the way we take care of our calves.

Marvin & Jody Pratt

Marvin & Jody Pratt
Veal Growers

Presented by:
Barbara Huffman
President-Elect,
American Veal
Association

We are facing a very serious emerging problem in animal agriculture in the United States -- the animal rights movement. It is serious in that the movement is being fed on emotionalism, misinformation, and perceptions. Most of the followers of the movement are caring and well-intentioned, but clearly, the fact remains that perceptions of what is good for an animal is being stated by those who have neither experience nor expertise in the field of animal husbandry. A very vocal minority, many of whom possess an underlying philosophy of vegetarianism, are questioning the methods of the family farmers of America -- and it is obviously not just a veal issue, but rather one of all animal agriculture.

H.R. 84, which was introduced after viewing a biased, one-sided video tape, would have far reaching negative implications on all of animal agriculture. The vast majority of veal farmers in the United States would be forced out of business. The bill has no scientific basis regarding animal husbandry practices. Veal calves are raised by concerned family farmers, fully aware that their success depends directly upon their animals' well-being. No one is more concerned for the welfare of the veal calves than the farmer who raises them.

The veal industry in the U.S. is about 30 years old. It utilizes a previously unwanted by-product of the dairy industry -- the Holstein bull calf -- as well as over $200 million yearly in dairy feed products. Veal production is dependent on the dairy farmer. In order for cows to produce milk, they must first give birth. Half of the calves are female and are usually kept by the farmer for replacing cows in the herd; the male calves are slaughtered shortly after birth, become dairy beef, or become milk-fed veal.

Nearly all veal production is handled by individual family units. Calves are housed in well-insulated, well-ventilated barns with supplementary heating systems. The vast majority of veal calves are raised in cold climate states. When the winter temperatures often reach well below the -20 degree readings, veal calves are housed in barns in temperatures of 65 to 70 degrees.

Calves are individually housed for the good of the animal. Each calf is inspected many times daily, thus allowing for an excellent health inspection. With individual stalls, there are fewer healthy problems, resulting in a high livability rate in veal barns. Because each calf has his own private stall in which to rest, he can choose to interact with his neighbor or to rest without being disturbed. Each calf is assured of getting his own food supply, thus removing the possibility of the more aggressive animals "stealing" from the less aggressive animals.

Calves have adequate room in which to stand up, lie down, groom themselves, and make the normal postural adjustments. The only thing they cannot do is to turn around in a complete circle. Because the calf is tethered, manure is confined to the back of the stall, away from the feed and water. Oak slatted flooring is provided for comfort and cleanliness. Manure falls through the slats to the floor below, where it is cleaned away daily. The individual stall features a mere participation at the shoulder area, thus allowing for the animals' privacy and protection, yet allowing them the ability to interact with their neighbors.

The health of the calf is of utmost importance to the veal farmer. Working closely with veterinarians, we use prescribed medications when needed, while giving careful attention to medication dosages, duration of treatment, and withdrawl times. Calves are fed a nutritious, highly palatable milk replacer formula. Comprised of nonfat dry milk, whey, whey protein concentrates, and animal or vegetable fat. The healthful product allows for an average weight gain of 2 1/2 pounds daily. The health needs of the veal calf are obviously provided in this type of feeding program.

The nutritional needs of the veal calves are also met with supplemental vitamins, and minerals. Every veal farmer knows that an adequate amount of iron is essential to maintain the animal's health and to assure growth. If a calf does not have adequate iron, he will become weak and will not eat; a calf that does not eat does not grow.

Changes in an established, successful livestock system should not be made on the basis of emotions and perceptions. Changes should come only if credible scientific research indicates that change would be beneficial for the animal. It is logical that the livestock producer, not the public, be charged with the responsibility for animal welfare. The producer is the central figure in animal care. Changes forced by those lacking expertise or experience in animal husbandry would lead to higher costs, inefficient systems, and decline in animal welfare.

The animal welfare committee of the American Veterinary Medical Association, in their March, 1989 meeting to review their position on veal calf production, has stated:

CONFINEMENT REARING OF VEAL CALVES HAS SOME UNIQUE ADVANTAGES:

1. The animals, if housed and fed properly, in well-ventilated buildings, with proper clean up procedures, are provided with excellent living conditions.
2. Good preventive medicine procedures can be implemented.
3. Observation of each animal on a daily basis is possible.

4. Calf losses due to disease are minimal.
5. Complete parasite control is possible.
6. It enables the industry to avail itself of one more phase of animal production.

They go on to say that these food animals are adaptive, as evidenced by the performance and health achieved by confinement rearing, and that confinement provided many opportunities to enhance their health and welfare. Quoting the summary statement of the AVMA animal welfare position, page 44: "Good livestock and poultry producers are increasingly attentive to the welfare of the animals in their care. The vast majority combine scientific, moral, ethical, philosophical, and economic values, attitudes, and concerns. Their success depends heavily on the welfare of the animals under their stewardship. Most are professionals and well-educated in their field. Being specialists, they are even more in tune to what is required for the welfare of their charges than were their counterparts of the past. The trend toward professionalism in all aspects of livestock and poultry production, including a sensitivity to animal welfare, will continue."

The American Veal Association has passed a resolution sponsoring veal calf research on production practices. The practices that we, as an industry, advocate in the AVA Guide for the Care and Production of Milk-Fed Veal Calves have evolved through experience and research to be a sound program for calf raising. We welcome continued research to substantiate this. If another alternative is proven to be more advantageous, we want to know. Our main concern is for the welfare of our animal; our survival is dependent on his welfare.

We, in the veal industry are proud of our accomplishments, including health management, high rate of livability, excellent animal care, and our quality end product. The veal farmer allows for the animal's shelter, health, warmth, nutrition, and safety. H.R. 84 will put the milk-fed veal industry of the United States out of business and will render hundreds of thousands of Holstein bull calves as useless, unwanted by-products of the dairy industry.

CONSIDER THESE FACTS:

- Veal is an important part of the economy of the United States. It benefits dairy farmers who sell bull calves and surplus dairy by-products, as well as growers who raise the animals and packers who process and sell the sought-after final product. Traditional beef producers also benefit, as the sale of bull calves for the veal market keeps additional pounds of beef from the market.
- Nationally, more than $200 million is added to the dairy industry through purchases of dairy by-products. This includes over $100 million in whey, $64 million in non-fat dry milk, $30 million in whey protein concentrate, and $10 million in milk replacer. The veal industry has created a market for previously unwanted dairy products such as whey.
- Approximately 1.2 million Holstein bull calves are utilized in the milk-fed veal industry. These calves were a previously unwanted by-product, having little or no value. Currently, these newborn calves, a week or less of age, have a value of about $175.
- Approximately 1800 family farmers in the United States would be out of business if H.R. 84 would go into effect.
- The veal industry is completely UNSUBSIDIZED.

LEGISLATION IS NOT NEEDED FOR THE FOLLOWING REASONS:

1. It is based upon a misunderstanding or lack of understanding of modern veal husbandry practices, specifically the use of the individual stall system. The dimensions for the stall in the proposed bill are taken from the Guide for the Care and Use of Laboratory Animals, table 2-1, and refers to the minimum space recommendations for DOGS IN LABORATORIES. These required stall sizes would increase our stalls to three times the current width. A farmer could not exist by cutting his production by 2/3.
2. The requirement for solid, digestible feed is totally unnecessary. A young animal survives on milk or milk-replacer and is not capable of digesting solid feed.

3. The American Veal Association already has guidelines for the care and production of milk-fed veal, allowing for the production of veal in a humane, healthy practice.

4. The economic impact on veal producers would be devastating. We would be out of business.

5. The economic impact on the agricultural economy would be devastating. (Loss of income to the dairy industry, as well as the veal allied industry concerns.)

6. The economic impact on the federal government would be staggering since USDA has neither the staff nor the funding to train inspectors and to carry out the program outlined in the proposed legislation.

7. There is no farmer experience or scientific basis which demonstrates that one method of raising veal is better than any other method in all situations. Choice of production methods should be dictated by personal preference, size of operation, geography, climate, etc. There is no demonstrated record of inhumane treatment of calves by producers following established industry guidelines. An entire industry should not receive federal legislation based upon any isolated individual instances of poor management.

8. The bill implies that the milk-replacer feeds are not sufficient for the dietary needs of the calves. This totally incorrect assumption has been refuted in the production of healthy, strong animals, with an average daily weight gain of 2 1/2 pounds.

9. This bill would affect not only veal producers but also those involved in dairy or beef. The definition section of the bill does not distinguish between beef calves or dairy calves or milk-fed veal calves, nor does it specify male or female animals, thus including both genders in this bill (the milk-fed veal industry uses only the unwanted male calves). The bill defines "calf" as the offspring of a cow, and that is less than nine months of age. "Veal" means the meat and organs from a calf. "Enclosure" means crate, stall, or pen to house a calf. Therefore, dairy and beef producers would be negatively impacted by this bill.

AMERICAN NATIONAL CATTLEWOMEN, INC.
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Testimony on Behalf of the

AMERICAN NATIONAL CATTLEWOMEN, INC.

related to

H.R. 84

ANIMAL PRODUCTION PRACTICES

before the

Subcommittee on Livestock, Dairy and Poultry

of the

House Agriculture Committee

UNITED STATES HOUSE OF REPRESENTATIVES

submitted by

Jane Lindgren, President Elect

Joliet, Montana

Tuesday, June 6, 1989

My name is Jane Lindgren and I am a beef producer from Joliet, Montana and President Elect of the American National CattleWomen. I would like to thank Congressman Stenholm, Congressman Brown and the committee members for the opportunity to testify today in opposition of HR 84.

My husband and I have a private cattle feedlot as well as a cow/calf herd. We are very proud of our cattle operation...they have been our livelihood for some 40 years.

Animal husbandry is one of the oldest professions on earth. The tradition of livestock production is a very demanding business fraught with many problems, perils and risks, including the unpredictability of weather, markets, politics and laws.

Cattle people are known for their integrity. Transactions amounting to thousands of dollars are made with no written contract. Their word is their bond and and their contract. This same pride and integrity is carried into our manner of handling and caring for our cattle.

The health and well-being of our cattle is of primary importance to cattle producers. It is our livelihood. If the cattle suffer or die, believe me, we also feel the pain and suffer. As research and experience reveal new and improved ways of beef production, we will gladly cast aside our traditional methods and embrace new ideas and practices.

As a women involved in the beef industry and today representing some 30,000 women cattle producers, let me assure you the nurturing and protective instincts we project to our family members are also extended to our livestock. Realizing of course that they are production animals and not companion animals.

I guess that you can say cattle people are the original animal welfarists....always have been and always will be...we just haven't felt the need to brag about it until now. It is instilled in our very existence.

HR 84 could have a substantial impact beyond that of veal producers. Under section 6 of HR 84 the broad definition of a calf refers to any bovine animal under 9 months. This broad definition could be construed to also include beef cattle calves which could disrupt the normal and very humane production practices of beef cattle. Section 3 of the bill would impose dietary requirements which would be totally inappropriate for beef calves.

The cattle industry has never been one to ask for or receive government support for their business. Nor have they been an industry that needed government regulation to carry out their business in the highest moral and ethical manner. I suppose the old adage of "Why fix something if it isn't broke?" is appropriate here.

The veal industry has been misrepresented by those adept at manipulating the press and the public. HR 84 reflects the viewpoints of a few and as an organization, we strongly oppose a regulatory bill based on emotionalism, perception and manipulation rather that of sound science and fact.

It's hard not to develop a bond of respect, appreciation and affection for the animals you are a caretaker to....every hour of every day and night. I know very few cattlewomen who have not spent the night nursing a newborn calf fighting for his life or worrying that her husband might not find his way back during blizzard conditions as he attempts to provide food and shelter for his treasured cattle.

The American National CattleWomen formed a task force in early 1988 to develop ways to tell the story of the humane and loving care we give our animals. It has always been a goal of the CattleWomen to tell the story of cattle production through classroom educational materials, ranch tours and one-on-one contact. We have a good story to tell and one that we are proud of. Unfortunately, there just aren't enough of us to tell the story and the media isn't that interested in "a little good news."

The American National CattleWomen have a creed and I would like to conclude my testimony by sharing the last few lines with you...

"we dedicate ourselves to do all in our power to instill in the coming generation, the love of the land and of life,

...the humility and awe before Nature, and the hope and faith in the future that is inherent in cattlemen....

Our cattle are our livelihood, we respect them, we nurture them and yes we are thankful that they can provide mankind with the necessary nutrients for good health and the many by-products that enrich are lives.

Thank you for this opportunity to testify today.

HEARING ON H. R. 84
"Veal Calf Protection Act"
June 6, 1989

My name is Kay Zeosky. I live at R.D. 1, Box 5, Turin, N.Y. 13473. I am a dairy farmer and National Dairy Chairperson for Women Involved in Farm Economics (WIFE). Since calves raised for dairy are included in this legislation, I would like to add my comments to the record.

First I would like to state that we all share the same concerns for our animals. No reasonable person can stand to see an animal mistreated. ~~I believe~~ we already have STATE laws on the books to deal with those situations.

Well treated animals grow better. A dairy heifer that is not treated with kindness will grow up to be a cow that kicks every time you try to milk her.

Our calves are raised in individual stanchions because they have a very strong sucking instinct. If there is any way for them to reach, they will suck the next calf's udder. The resulting infection will prevent that calf from ever becoming a milking cow. She will be born with a "blind" quarter. One that contains no milk. With only three quarters, the milking machine will not stay on her. They also suck each other's mouths and navels, spreading communicable diseases and navel infections. Sort of like a kindergartener with a cold running around kissing everyone in the class on the mouth.

Our stanchions are graduated in length, and as the calf grows, she is moved down a few stanchions to one that is exactly the right length so her manure can fall in the gutter behind her rather than into the bedding underneath her. In this manner the calf is always clean and her bedding is dry. If the stanchion is too long, the dirt under her will promote diseases. Our calves are tied at the front as long as possible without allowing them to turn around in their stalls. That keeps the manure at one end and a supply of clean feed and hay at the other. Calves don't have an understanding of what will happen to their feed if they should happen to get turned around. Not only would they ruin their own feed, but it would make the feed in the manger dirty for many other animals. The other reason we use individual stalls is to monitor what each calf eats. When we raised calves in pens one could be ill for quite a few days before we realized she was off feed and needed medical treatment. If, in a pinch, we have to tie calves near each other until there is room in an individual stanchion, those calves will not do as well. The "boss" calves take all the hay and feed. Even after that calf has eaten all she can, she may not allow the other one to eat. It's similar to putting your two-year-old's dinner on the same plate with your sixteen-year-old's without being able to explain to him that it was meant for both of them.

I don't think we should be concerned about calves being put on solid food immediately. Thirty years ago when I raised my children, all babies were eating cereal at two weeks of age. Now the trend has swung back to where it's all right to nurse your baby for many months without worrying about solid food. I think if the proper nutrition is there, the amount of water added to make it either solid or liquid is immaterial. Growers tell me that their veal calves must look good and healthy or those buyers won't be back.

Calves that are not properly cared for and fed will not breed at the proper time to enter the dairy herd. Keeping the calf even one extra month ends up costing the farmer a lot of extra money. It would be a very stupid dairy farmer that didn't give his replacement calves the best care he could possibly give.

When my husband read about the length of the calf stanchions he said, "My gosh, is there a law about the length of baby cribs? I've seen some bassinets that didn't have six inches to spare!" I would even venture a guess that every single person in this room does not have a bed that is six inches longer than he is. Perhaps we should do some legislation about baby cribs first.

When I first came to a dairy farm Many years ago, I told my mother-in-law, "Boy, I sure would hate to be a cow!" My mother-in-law said, "Why? Her surroundings are always kept at a perfect temperature, she just lays there while we run and bring her food, currycomb her, give her a haircut when she needs it, and wait on her hand and foot. She has no work to do but eat as much as she can of the best food we can find for her." After 34 years of waiting on them, I have to agree with her.

Thank you for listening.

TESTIMONY

by

Wanda Cooper

My name is Wanda Cooper. My husband and I have facilities housing 960 veal calves in western Michigan. We began veal production in 1976 on our centennial farm. Veal production is the sole income for our family that includes two daughters.

In the early 1980's concerns regarding techniques of raising special fed veal calves became more apparent to may husband and myself. The health and welfare of our calves is of primary concern to us, so we thought if there was a better way in which to raise our calves we should do it. We decided to convert one calf room to loose housing in March 1984, and in June of same year we completed construction of our fourth room, designed specifically for loose housing:

- Large windows and windows in all doors.
- Raised slatted floors in pens accommodating 25 calves each.
- Along one side partitions were placed to protect the calves and allow uninterrupted rest. They were free to leave this area at will.
- Mechanical computerized nipple machines with six suckling nipples for each pen.

Our 16 months of struggle with those two rooms remain vivid in our memory. Although I could talk for hours on our experiences I will try to highlight our information.

1. Disease problems were nothing short of horrifying
   a. Sucking common nipples was an ideal source for spread of disease and pathogens.
   b. We had no control over the amount of milk calves could drink at will. Weak calves were pushed aside.
   c. Navel sucking, ear sucking, and urine drinking were common. Naval and ear infections resulted.

2. Early detection of illness was much more difficult and therefore treatments were often delayed. Identification of calves became necessary for treatment records. This required eartagging of the calves a procedure we do not normally do.

3. Normal health maintenance practices were difficult.
   a. Example: Delousing procedures would cause the whole pen to get excited, run, slip, etc. If delousing powder were used, the calves were able to lick the powder off one another.

4. We had slotted floors with no bedding. Calves would slip when walking the length-wise lay of the floor boards. Around the feeding machines the floors were especially slick from milk drizzled from the nipples. There we placed horizontal "tracks" for better footing, I sprinkled sawdust for traction, but weak calves did not walk well in the pens and often could not stand properly before the nipples to suckle.

5. Quality control over feed composition was compromised:
   a. Feed often "bridged" in the machines and the powder/water ratio would be incorrect.
   b. As the calves got older they often chewed off ends of the nipples, making them unusable. Much milk was wasted as it drained on the floors.

6. Labor costs were higher.
   a. More time had to be spent monitoring and treating the calves, and checking equipment.
   b. Handling calves for diagnostic or treatment purposes was very difficult and required two persons.
   c. We placed ourselves and our employees on eight hour shifts around the clock for more constant vigilance. NOTE: Our employees and our family experienced great stress and morale problems. We worked hours on end with a system that seemed to fail no matter how much time and effort we expended.

7. Calves were not uniform in weight, carcass conformation, or color.
   a. We separated calves into pens by activity, aggressive vs. weak. Although the aggressive calves consumed more feed, too many did not make minimum weight even though marketed at a later date.

8. Resources were very limited for assistance with loose housing problems. Our loose housing representative stayed with us at the farm for three days at our request. When he left, our problems remained, and we had no other place to turn to for assistance.

We learned a lesson, costly not only in dollars, but in the welfare of our calves and ourselves; what sounds ideal may not work in practice.

Specific Information:

First Group:	16.8% mortality	.7% cull
	In weight 105#	Out weight 314#
	Avg. daily gain 1.85#	Feed conversion 2.1
	Light weight calves (did not meet minimum carcass weight) 73	
	Loss per calf sold ($79.60)	
Second Group:	10.3% mortality	6.4% cull
	In weight 109#	Out weight 268.8#
	Avg. daily gain 1.5#	Feed conversion 2.53
	Light weights 187	
	Loss per calf sold ($102.25)	
Third Group:	8.3% mortality	7.94% cull
	In weight 105	Out weight 364
	Avg. daily gain 2.25#	Feed conversion 1.95
	Light weight calves 24	
	Loss per calf sold ($58.42)	
Fourth Group:	10.65% mortality	8.5% cull
	In weight 105	Out weight 317
	Avg. daily gain	Feed conversion 2.2
	Light weight calves 104	
	Loss per calf sold ($73.82)	
Fifth Group:	17.4% mortality	13.2% cull
	In weight 112	Out weight 301
	Avg. daily gain 1.8, 1.6, 1.3 (sold in 3 lots)	
	Light weight calves 66	Feed conversion 2.4
	Loss per calf sold ($96.93)	

Total losses in calves and operating expenses equaled $81,858. Equipment losses and pen remodeling drove up our losses to over $100,000.

In conclusion, we will never again try to raise calves in an alternative housing situation without sound, scientific research and evidence that would support such a move. Trial and error on my farm is finished. If a better, proven system than the individual stall were recommended and successfully field-tested by the scientific community, we would not be opposed to trying it on a small scale, keeping an open mind to future veal production. We want what is best for our calves, we want to continue in our farming, and we want to be able to meet our financial obligations and put our children through college. Loose housing, as we experienced it, would destroy all those goals.

submitted by

Jacquie Compston, Livestock Chairman
American Agri-Women

My name is Jacquie Compston and I am from Wellington, Nevada. I am submitting this testimony on behalf of my cattle producing family, American Agri-Women, the American Hereford Auxiliary and the American National CattleWomen.

Thank you for allowing me to testify here today. This bearing is very important to us as livestock producers. A better scope of understanding and flow of communication between the livestock producers and animal welfare groups is essential.

We are gravely concerned about the ramifications of the bill H.R. 84 cited as the **"Veal Calf Protection Act."** This bill declares that it is the public policy of the United States to avoid cruelty to animals. We as professional livestock producers, abide by this philosophy to the utmost, as we care fore each and every animal daily, under financial pressure, severe weather conditions, predators and the media. The daily weight gain, and hemoglobin count is proof that the animal is not under stress.

The consuming public dictates to us what is desired. We in turn try to produce a product suitable to their needs. Lean beef is just one example of our efforts. We are just as health conscious as the general public. We need positive affirmation to proceed in our endeavors in order to successfully do what is best for everyone.

This bill encompasses a topic far too complicated to provide a simple solution. The bill will affect any farmer or rancher who sells even a single calf for slaughter. The bill's broad definition of veal defines "veal" as the meat and organs from a calf 9 months old or younger. It does not differentiate between young bovines raised for veal and those which are not. We wean registered calves for breeding stock and commercial calves for market at 6 to 8 months of age and transport them to a variety of places; such as auction yards, feedlots, or pastures. We try to provide a healthy and clean environment for these animals. Under the guidance of doctors of veterinary medicine, and the assemblence of scientific data through our herd association and educational institutions. We feel that we are capable of handling our inquiries without government intervention. By choice, some producers have chosen to produce veal by the range method. This per say is documented, meaning not in stalls. Scientific facts may determine how the animals are raised. Climate, breed of the animal, environment, location; all of these have an impact on his decisions. Cultural preferences may also influence the producer.

With the rising costs in our industry, we cannot afford to have anymore restricting expenses. The possibility of one million or more calves competing for our fat cattle markets could be extremely damaging to the entire beef industry and our way of life. We can change and improve our production methods internally. We have confidence in our national cattle association and their representatives. My recommendation is to defeat this bill.

We must educate and not legislate.

U.S. House of Representatives
Committee on Agriculture
Rep. Charles W. Stenholm, Chairman
Subcommittee on Livestock, Dairy, & Poultry
Room 1301 Longworth House Office Building
Washington, D.C. 20515

Dear Representative Stenholm:

Subject: Written testimony for June 6, 1989 hearing

I would like to introduce myself. My name is Gary Wright, 45 years old, and with my family (wife and 4 children) reside in Bradford County of the state of Pennsylvania. I am very proud to state that we are veal farmers and that on our family farm we have been caring for calves for approx. 10 years.

I am very concerned about and opposed to HR84. This legislation is based upon a perception of veal farming as depicted by "Misery on the Menu" and the Slocum incident in Bradford County.

I would like to speak concerning the Slocum incident in Bradford County. I received a telephone call from the PA State Police at approx. 3 p.m. Dec. 24, 1988. The officer stated the situation and that efforts had been made since early that morning, both by the State Police and the Bradford County Humane Society to find someone to remove and care for these animals. Without hesitation, I agreed to do so. I arrived at the Slocum property at approx. 4 p.m., where I met Diane Forrest, of the Bradford Co. Humane Society, and Officer David Motko, of the State Police.

What I saw was the result of an irresponsible, uncaring person who should never be called a veal grower. I saw calves dead, calves starving, 2 uncared for dogs, 2 uncared for hogs, and unclean conditions everywhere, inside as well as outside the barn. I saw calf excretions backing up in the barn, rats, insects (lice on the calves) ventilation improperly being run and no heat in the barn. At the same time, I saw a feed room full of feed, hot and cold water available as well as the equipment necessary to supply feed to the calves. I assure you, Ladies and Gentlemen present here today, that I am as appalled today as I was in my first encounter on Christmas Eve 1988.

I am pleased to report that legislation was in place in PA and that Slocum was convicted of cruelty to animals, received a fine and a jail term and is no longer working with animals.

As to the conviction, Diane Forrest of the Bradford Co. Humane Society, reported to Jim Lowman of Valley Bureau, and I quote, " I'm rather pleased with the whole thing."

As an extension of my family farm, I supply many farmers in New York, PA, Ohio, and New Jersey with holstein bull calves. This activity has led to my exposure to many veal farmers over the past 10 years. Never have I experienced a single incident that even hints of a situation such as I was exposed to at Slocum's.

I am convinced that the husbandry, animal welfare practices, and the vet-client relationships that we employ on our family farm and the farms that I have personally had contact with, places us in, and I quote from Rep. Bennett himself "The vast majority of producers raising veal are doing so well above the standards that my legislation would set." Is it then necessary to mandate federal legislation based upon an extremely small minority of "poor" producers, such as the Slocum incident I have discussed?

Even further, can you expect to legislate to another Slocum (if he existed) proper animal welfare practices any better than you can legislate away child abuse or immorality? The vast majority of veal farmers employ sound farming practices and know that what's good for their animals will be good for them. A person who mistreats his animals is throwing his livelihood away, that type of person is not what I encounter when I visit veal farms.

Th proposed legislation HR84 would, if enacted, place such an unnecessary financial burden on veal farmers that, in speaking for myself, would legislate my family off the family farm that we love so much.

I encourage research in the area of animal welfare and husbandry practices which will benefit my animals. HR84 clearly is not in the best interest of the animal or the farmer.

This legislation will affect not only veal, but dairy and beef. Generally, the raising of all calves under the age of 9 months, and anyone who markets a calf during the same period in violation of the Act.

I firmly believe that federal legislation to take care of the single bad apple is overkill and a waste of Government Resources. Proposed legislation based upon a television show that was designed to capture emotions and hype a growing urban society cannot in-and of itself tell me how to better care for my animals. The perception of cruelty and the accusations of inhumane treatment are usually leveled by individuals and groups with no farm animal husbandry expertise nor first-hand experience with the species they claim to wish to protect. The usual tactic is to show emotional photos and videos, that to the unitiated, appear to show an inhumane practice.

Sincerely,

R Gary Wright

R. Gary Wright
Veal Farmer
R. D. #1 Box 276
Canton, PA 17724

TESTIMONY ON BEHALF OF THE

MISSOURI CATTLEMEN'S AND CATTLEWOMEN ASSOCIATIONS IN AFFILIATION WITH AMERICAN AGRI-WOMEN

related to

H.R. 84
ANIMAL PRODUCTION PRACTICES

before the

Subcommittee on Livestock, Dairy and Poultry
of the
House Agriculture Committee

UNITED STATES HOUSE OF REPRESENTATIVES

Submitted By

SHERI SPADER

Rosendale, Missouri

Animal Welfare Chairperson
of MISSOURI CATTLEWOMEN

Tuesday, June 6, 1989

TESTIMONY

Sheri Spader

My name is Sheri Spader. I am a cattle producer from Rosendale, Missouri, active in local, state and national cattle associations and American Agri-Women.

Thank you for the opportunity to testify today.

The role of beef production in agriculture is basic to the economic well being of the nation's agriculture community and the nutrition of our society. Animal agriculture is also the only means to harvest and utilize over 45% of U.S. land; marginal land in the U.S. that is unfit for cultivation and production of cereal grain products. This is documented by our efforts in the past twenty years or more to minimize tillage practices, to conserve acres and to save the fragile environment in most parts of the U.S.

It's with these thoughts in mind that colleges and universities established animal husbandry departments in the late 1800's and early 1900's to help develop and educate farmers and ranchers in the area of animal production. It was this same time that animal protein was identified as an important part of human diet and needs. The term animal husbandry is a far reaching term but it reflects the dedication and commitment that livestock producers have to the very animals that establish their livelihood.

Today we seem to be approached by those who feel animal production is not in the best interests of the livestock; but for those of us involved we know that no prudent livestock producer knowingly does harm or damage to the very product that makes a livelihood for them and their family. In fact, livestock producers are and were the first animal welfarists in this nation.

Animal care, whether named by welfarist or husbandry, is our business. We are caretakers of these animals that serve a useful role in our society, directly affected by the quality of care given. We believe in the creationist philosophy with ourselves as responsible nurturing stewards, fulfilling this role to the best we can.

In contrast, the philosophy of animal rights demands equal value for animals. The Animal Rights groups, by their very name, seek to produce legal rights for animals. This philosophy is not a new one as it has tenants in Eastern religions.

However, in our democratic society, founded upon a wide freedom of philosophy and religion, no such doctrine should be forced on another by way of legislation imposing its tenants of philosophy on a livelihood.

As a cow-calf producer, who has spent my entire life in the production of beef cattle, I am affiliated with groups of other such producers. We spend volunteer time and money educating ourselves in the best management and practices of this role we care so much about.

In representing two such groups, the Missouri CattleWomen and Cattlemen, I carry Resolutions passed in 1989 concerning this issue. On May 25, 1989 the Missouri Cattlemen passed unanimously a Resolution opposing H.R. 84 and its intent, and are opposed to any such legislation restricting beef production in a like manner.

This legislation sets a precedent we do not want or need, imposing philosophic doctrine of others on our methods of animal care in our livelihood.

# # #

(Attachments follow:)

MISSOURI CATTLEMEN'S ASSOCIATION

RUSSELL HARRIMAN
Executive Vice President

P.O. Box 315
Ashland, Mo. 65010
Phone (314) 657-2169

In Membership Is Strength

Missouri Cattlemen's Association

Policy Statement

regarding

HR84--Veal Calf Protection Act

The Missouri Cattlemen's Association's Board of Directors has approved a policy statement which opposes HR84, the Veal Calf Protection Act. In fact, the policy includes opposition to any legislation that would regulate or restrict animal production.

Cattlemen must abide by the best of animal husbandry practices in order to maintain an efficient profitable enterprise. In fact they do so willingly because they are concerned about the welfare of their cattle and take a special kind of pride in caring for their health and well being.

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1989

Proposed Resolutions

Missouri Cattlemen's Association

1. Animal Care

Whereas, Missouri Cattlemen have always been concerned with the proper care and welfare of livestock, recognizing that good animal husbandry practices are essential to efficient and profitable production; and,

Whereas, there is a continuing need to use animals in necessary and responsible research programs;

Therefore, Be It Resolved, That the Missouri Cattlemen's Association recognize the following definitions:

--Animal Welfare--the reasonable care of all animals, i.e. good animal husbandry practices.

--Animal Rights--a position taken by those who believe that animals have legal and moral rights; and,

Be It Further Resolved, that the Missouri Cattlemen's Association opposes the position taken by animal right groups and will take appropriate action to resist their unsound, unscientific efforts to attack good animal husbandry practices as well as responsible and acceptable research practices.

2. **Animal Production Practices**

Whereas, on occasion the industry is faced with instances when some in the industry have not conducted themselves or their business in keeping with generally accepted and recognized business and livestock management/husbandry practices; and,

Whereas, the entire Beef Cattle Industry often bears the brunt of public ill-will and regulatory action over the irresponsible and inappropriate action of a few;

Therefore,. Be It Resolved, That the Missouri Cattlemen's Association calls upon and urges all cattlemen to follow commonly accepted livestock husbandry and business management practices in animal care; and,

Be It Further Resolved, that MCA shall not be compelled to defend anyone in the Beef Cattle Industry who has clearly acted to abuse livestock; and,

Be it Further Resolved, that MCA may best serve the industry by supporting action by appropriate state or federal agencies against those who do abuse livestock.

DORIS DAY ANIMAL LEAGUE

Statement of the Doris Day Animal League

In Support of

H.R. 84, the Veal Calf Protection Act

before the Sub-committee on Livestock, Dairy and Poultry,

Committee on Agriculture

U.S. House of Representatives

Sara J. Amundson
June 6, 1989

The Doris Day Animal League, with over 300,000 members nationwide, fully supports the "Veal Calf Protection Act" (H.R. 84). This bill will better protect both animals and humans by addressing humane concerns associated with the raising of milk-fed veal.

The members of the Doris Day Animal League share two primary objections to the raising of calves for veal in confinement:

> 1) a livestock production system which encourages unnecessary and inhumane intensive husbandry practices; and
>
> 2) the ramifications of these practices on consumers due to the antibiotic residues in the food produced as a result of these practices.

Most farmers, scientists and consumers will agree that the lives of the crated veal calf are stressful and traumatic, at best. Raised in the dark to preserve quiet so calves conserve energy, standing in stalls not large enough for a calf to lie down and fed an iron-deficient liquid diet, these animals live quite differently from those raised on the family farm. Given the many alternatives available to produce meat, and even veal in this country, the unnecessary suffering of these calves should simply not be tolerated.

In addition, these practices create an atmosphere for further abuse. These animals are hidden from society and raised by individuals who often have no training in farming or animal husbandry. This leads to cases of serious neglect which might be prevented if calves were raised in a more natural environment. The Veal Calf Protection Act would give calves a chance to develop a natural immune system, muscle tone and strength to better protect them from malnutrition and disease.

In one recent example, charges of 64 counts of cruelty to animals were brought against a farmer in Bradford County, Pennsylvania, the largest veal-growing county in the United States. On December 24, 1988, State Police Trooper David Motko and Diane Forrest of the humane society found 49 dead calves and 15 sick and diseased animals in a barn operated by Michael L. Slocum. Slocum was raising the calves under contract to Alpen Milch and Custom Blend Feed Company of Ohio.

As photographic evidence indicated, the veal calves were in a virtual state of neglect. Although one neglect case should not be an indictment of the entire industry, the issues brought out at trial do raise serious questions about veal farming in general. The concerns raised at the Slocum trial include: possible ground water pollution; feed company management problems; and the administration of medicated feed.

Veal farming appears to contribute to ground water contamination. In 1987, it was estimated that "more than half of the approximately 4,000 private wells in the Northern Tier (Bradford, Tioga and Potter Counties, Pennsylvania) are contaminated by harmful bacteria." (Sunday Star-Gazette, November 1, 1987) Arthur Davis, Secretary of the state's Department of Environmental Resources stated, "More people get sick from drinking water in Pennsylvania than in any other state." With the Northern Tier of Pennsylvania represented by numerous large veal operations, a primary cause of ground water contamination is run-off from animal waste.

During the Slocum trial, several questions were raised with reference to contractual agreements between farmers and feed companies in veal-growing. Slocum insists he requested proper veterinary care from the feed company representative (David May) for the ailing calves. It appears the feed company did not respond to Slocum's need for veterinary care until the request could be processed through the proper bureaucratic channels. Because of this, Slocum's calves became more ill.

In addition, when the calves began to die in numbers on Slocum's farm, he requested removal of the bodies. Slocum's concerns centered around the possibility of the feed company accusing him of selling calves; thus, it was important for the company to see the bodies. Unfortunately, the company did not remove the bodies until after Slocum was charged with cruelty to animals. David May, the company representative, was unavailable to testify at the Slocum trial.

These questionable practices by the feed company indicate a genuine lack of concern for both the veal calves and the farmer's husbandry practices. Although regulations requiring larger enclosures and social contact will not stop the mistreatment of all veal calves, it will give calves a more natural existence and therefore a better chance at a healthy life.

Another concern related to raising calves in small crates is the attendant reliance by veal farmers on subtherapeutic doses of antibiotics to fight disease. The resistance of antibiotic therapy to infection may be linked to the utilization of antibiotics in the raising of veal calves and other food-producing animals. Over 24% of salmonella bacteria are now resistant to many antibiotics. (Science, 21 November 1986, 234: 964) And the New England Journal of Medicine has warned: "It appears that unless drastic measures are taken very soon, physicians may find themselves back in the pre-antibiotic Middle Ages in treatment of infectious diseases."

With regard to drug use in veal calves, the Food and Drug Administration has not approved any singular drug for use in the raising of veal calves. Yet, the United States Department of Agriculture continually finds residues in calves after slaughter, including drugs which have been banned for use in food-producing animals.

Chloramphenicol has been banned in the United States for a number of years, as its effects can be lethal in humans. (American Journal of Veterinary Research, 1988; 49: 914-17) Fatal aplastic anemia and toxicosis are two drastic human health threats caused by chloramphenicol. However, formula-fed calves continue to fail USDA residue tests. (Food Chemical News, July 20, 1987)

Some drugs have not been banned in food-producing animals, but have serious side-effects when initially administered to the calves. "Nitrofurazone can be very toxic. NFZ can also cause bleeding disorders in calves, so [veterinarians] do not use it without some risk," states Dr. Dean Elliott. (Farm & Home News, December 26, 1988) One can presume that the toxic effects of this drug may seriously endanger human health, as well. The article also states that "you [the farmers] are legally required to work with a veterinarian when using them." Yet, the evidence clearly signifies that abnormal residues are being found in formula-fed calves. (FSIS Report, Spring 1989) This indicates either improper veterinary care or a lack of consultation with veterinarians by those in the veal calf business. The recent FSIS report distinctly demonstrates that antibiotic residues drop dramatically in calves raised in a more natural manner.

In conclusion, based upon the bill's emphasis on the inhumane treatment of milk-fed veal calves and the need to seriously address the effects of drug residues in veal, the Doris Day Animal League supports H.R. 84. The unnecessary and inhumane treatment of animals and the misuse of drugs for increased profit at the expense of the American consumer, have no place in American society in 1989. Thus, we respectfully urge you to favorably vote H.R. 84 out of committee.

ANIMAL AGRICULTURE

MYTHS & FACTS

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by

animal industry foundation
1701 Ft. Myer Drive/Suite 1200/Arlington, Virginia 22209/703/524-0810

Revised April 1989

In an increasingly urban society, our contact with animals, especially farm animals, is limited. While man and animal depend on each other, our modern culture separates us from other species more and more. As a result, our understanding of the needs and roles of domestic animals becomes weaker, and in some cases, distorted.

One of the best strongholds of animal welfare in our culture is the farmer. With the exception of zoos and animal parks, only the farmer enjoys close, daily contact with animals. As farmers tend livestock and poultry, guaranteeing their health and welfare, the animal provides an economic return to the farmer in the form of wholesome, high quality foods valued by the vast majority of consumers.

The consuming public today is generally unaware of farmers' relationship to their animals, and how meat, milk and eggs are produced on modern farms. The average consumer may not make the connection between attractively packaged meat, milk and eggs in the supermarket, and the process of getting these foods from the farm to the dinner table.

The image of the family farm with its red barn, a few chickens in the yard, some pigs in the mud and cows in the field isn't accurate anymore. But neither is it the sterile, mechanized, emotionless "food factory" that some would have us believe. Today, U.S. animal agriculture is a dynamic, specialized endeavor, the envy of the rest of the world. Only in America can 3% feed 100% of the population as efficiently as we do. The key to this efficiency? The best cared for livestock and poultry in the world.

Modern farm animal production is no accident. Improved animal housing, handling practices, and healthy, nutritious feeds are the result of billions of dollars of private and government research into how to raise healthy animals. And as American animal agriculture grows and changes, there is a double constant: Farmers' concern for the welfare of the animal, and their dedication to providing the highest quality, safest food in the world.

Farmers have always enjoyed broad public support for their efforts to provide abundant, nutritious food. But today, groups which reject the harvesting of animals for food, and others, who because they don't have the facts or have bad information, are working to convince the public that farmers and ranchers no longer tend their animals as animals, but as food "machines."

It's time to set the record straight. This booklet will explain the inaccuracy of some of the commonly heard myths about modern animal agriculture, and give the general facts on how farmers and ranchers operate and why. It will also provide an insight into how some everyday parts of our lives—not connected to the dinner table—are the result of modern animal agriculture.

MYTH:

Farm animals deserve the same rights as you or I. All creatures deserve to share the planet equally with man.

FACT:

To believe that man and all other animals exist with the same rights is anthropomorphism, or the "humanizing" of animals. This is a belief held by some vegetarians and animal rights extremists, and is not accepted by the general population. There are theological, scientific and philosophical arguments for why man cares for animals so they may serve him. Certainly, man has the moral obligation to avoid cruelty in dealing with all animals in all situations.

MYTH:

Farmers care less for their animals than they do for the money animals bring them. Agribusiness corporations mislead farmers into using production systems and drugs that mean profits at the cost of animal welfare.

FACT:

Farmers and ranchers are neither cruel nor naive. One of the main reasons someone goes into farming or ranching is a desire to work with animals. A farmer would compromise his or her own welfare if animals were mistreated. Agriculture is very competitive in the U.S., a career which pays the farmer a slim profit on the animals he cares for. It is in the farmer's own best interest to see the animals in his charge treated humanely, guaranteeing him a healthy, high quality animal, a greater return on his investment, and a wholesome food product. No advertising campaign or salesman can convince a farmer to use a system or product that would harm an animal. Farmers are always looking for ways to improve their farms to ensure animal welfare and the economics of production.

We must also understand the difference between what an animal may want and what it needs. It is not generally in the best interest of the animal to be left untended. An animal may eat poisonous plants if in the open, or fall prey to predators. An animal may "want" to do these things, but does it "need" to?

MYTH:

Farming in the U.S. is controlled by large corporations which care about profits and not about animal welfare.

FACT:

Of the 2.2 million farms in the U.S., 87% are owned by an individual or a married couple responsible for operating the farm. If partnerships—typically a parent and one or more children or other close relatives—are added to this total, 97% of U.S. farms are family-owned and operated, according to the U.S. Department of Agriculture's "1987 Fact Book of U.S. Agriculture." Even those farms which are legally corporations are generally family controlled, with USDA reporting only 7,000 non-family controlled corporate farms in the U.S.

MYTH:

Farm animals are routinely raised on "factory farms," confined in "crowded, unventilated cages and sheds."

FACT:

Animals are generally kept in barns and similar housing, with the exception of beef cattle, to protect the health and welfare of the animal. Housing protects animals from predators, disease, and bad weather or extreme climate. Housing also makes breeding and birth less stressful, protects young animals, and makes it easier for farmers to care for both healthy and sick animals.

Modern animal housing is well ventilated, warm, well-lit, clean and scientifically designed for the specific needs of the animal, such as the regular availability of fresh water and a nutritionally balanced feed. For instance, a hog barn wouldn't be used for cows, any more than an adult would sleep in a child's crib. Housing is designed to allow the farmer to provide the best animal care and control costs.

8-1 >

MYTH:

Not only are all animals confined, most are held in crates and cages and not allowed to move at all.

FACT:

Animal behavior is as varied as human behavior. In some cases, animals are restrained to avoid injuring themselves, other animals or the farmer. All forms of restraint are designed for the welfare of the animal as well as efficiency of production.

Breeding sows are helped during breeding so they are not injured by the larger, heavier boar. When a sow is ready to farrow or give birth, she is placed typically for 3–4 weeks in a stall to make her delivery easier, help with veterinary care if necessary, ensure she does not step on or roll over and crush her litter, while allowing her piglets to be near her. Pigs are naturally aggressive and curious, and what has been described as "manic" or abnormal behavior during this protective restraint is currently under study by swine specialists.

Dairy cows are milked in stalls, usually twice a day. This is so farmers can use modern milking equipment, and to protect the cow and the farmer. Placing the cows in these stalls during milking also facilitates medical treatment of an animal weighing more than 1,200 lbs. At other times, most dairy farmers will turn cows out into pasture or into large pens.

Laying hens are kept in cages to ensure adequate feed and water reaches every bird every day and to facilitate egg collection. It allows the farmer to care for more birds efficiently and produce the millions of eggs consumers value each year. Sorting the birds into small groups helps control naturally aggressive behavior, such as pecking and cannibalism, while allowing the birds to interact with their penmates. It takes greater amounts of land, labor and money to raise laying hens in open flocks because of exposure to bad weather, disease, predators, etc. Today, one egg farm may house 50,000–100,000 hens. If layers were not raised in a controlled environment, feeding, cleaning, preventing disease, treating sick birds, and locating where 50,000 birds laid thousands of eggs each day would greatly increase the cost of eggs, and price a valuable food out of the diet of many consumers.

Veal calves may be raised in stalls, hutches, pens or in small groups. The system used by an individual farmer varies by region and climate, type of calf, farmer preference and size of farm. One system cannot arbitrarily be said to be better than another in all situations. Studies comparing these various housing systems are on-going.

Veal calves are generally kept in individual stalls to provide individual attention, improve general health, separate aggressive young bulls from each other, minimize or eliminate injury to the animals and the farmer, and to aid in feeding efficiency and veterinary care.

In modern stall systems, calves can stand, lie down, see, touch and react to other calves in well-lit, sanitary barns. It is not true that veal calves are kept in "boxes" or perpetual darkness. Veal feed is a liquid milk "replacer" product that is specially formulated for baby calves. It is a fortified formula containing minerals, vitamins, and animal health products, including minimum recommended amounts of iron to ensure calf health. The farmer would be compromising his own economic welfare if calves weren't kept healthy.

Beef cattle in large herds or feedlots are restrained generally when being given veterinary care. In cow/calf operations, housing allows for protection from predators and the elements, disease control and ease of handling.

MYTH:

Farm animals are routinely "mutilated" by beak trimming, tail docking, branding, deborning, castration, and otber practices to make it easier for the farmer.

FACT:

To the inexperienced viewer, some routine farm animal handling practices necessary to the welfare and health of the animal and the insurance of quality food may appear brutal, just as some life-saving human surgical and medical practices may seem brutal to the casual observer. All of these practices are done in a professional manner to ensure the welfare of the animal.

Egg laying hens may have their beaks trimmed—not removed—to avoid injury to each other as a result of the bird's natural cannibalistic tendencies. Claws may be trimmed to avoid injury during mating.

With hogs, piglets may have their needle teeth trimmed shortly after birth to avoid injury to the nursing sow and to litter mates. Tails may be docked or shortened to end a natural tendency toward tail biting that occurs in some swine herds.

Beef cattle, sheep and some dairy cattle may be dehorned when young to avoid injury to each other and to the rancher; castration, or neutering, may be necessary to help control aggressive behaviors in young animals, and to insure quality meat consumers demand. In sheep, tails may be docked to improve hygiene and prevent fly and parasite infestation.

Permanently identifying animals by ear-marking, tattooing, branding and other means is necessary to maintain accurate health records to prevent the spread of disease to animals and man. It also helps during marketing.

All of these practices are under regular review and new research is done to ensure their necessity and effectiveness, and to ensure the required results are achieved in the most humane, efficient manner.

MYTH:
A vegetarian diet is healthier than a diet that includes meat, milk & eggs.

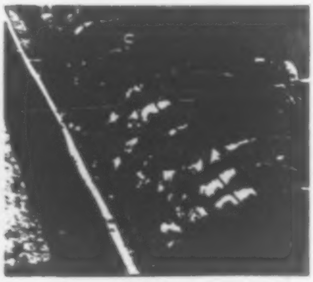
FACT:
Both the federal government and the American Heart Association contend a diet containing meat, milk and eggs is appropriate to both group's dietary guidelines. The Washington Post, reporting on the First International Congress on Vegetarian Nutrition held in Washington in March, 1987, had this to say: "The Congress didn't uncover any earth-shattering findings or recommend that everyone take up bean sprouts full time, " the Post reported. Health benefits can be derived by nonvegetarians who follow a prudent diet that is low in fat, sodium, sugar and alcohol. Just as there are nonvegetarian diets that are unhealthy, so too there are poorly planned vegetarian diets. The approach to healthful eating should be common sense.

MYTH:
Farm animals in "confinement" are prone to disease, forcing farmers to routinely use antibiotics, hormones and drugs to keep them alive. This jeopardizes animal and human health.

FACT:
Animal scientists, veterinarians and on-farm experience show animals kept in housing are no more likely to get sick than animals kept in the open. In fact, they're generally healthier because they are protected. However, farm animals do sometimes get sick. To prevent illness and to ensure that an animal remains healthy all of its life, farmers will take preventive measures, including the use of animal health products. These products are generally given to the animal in a scientifically formulated feed best suited to the animal's needs. This is the simplest way to make sure each animal gets the care indicated.

Animal health products include animal drugs and vaccines, in addition to vitamins, minerals and other nutrients the animal needs in a balanced diet. Not all animals are given the same treatment in all situations.

Animal drugs include antibiotics to prevent and treat animal disease, and most are not used in human medicine. There are antibiotics used in humans that are also used in animals. There is now an unresolved scientific debate over these uses. Since there is no conclusive scientific proof that the use of human antibiotics in animals—a practice going back 35 years—is a risk to human health, these products are used to prevent and treat illness in some animals, in addition to aiding growth.



MYTH:

Grain fed to livestock and poultry could be used to feed the hungry overseas.

FACT:

Grain fed to livestock and poultry is generally referred to as "feed grade." It is not usually intended for human consumption and is not generally the same quality and nutrient value as grain used in human food production. Animals, in fact, are the most efficient converters of this lower quality grain and other grasses and forages into high-quality protein.

MYTH:

The average U.S. farm animal is fed whatever the farmer happens to have available, without regard to what the animal needs for good health.

FACT:

The average U.S. farm animal, from the standpoint of nutrition, eats better than the average U.S. citizen. There are more than a thousand professional livestock and poultry nutritionists in the U.S.—many are Ph.Ds—who spend much of their professional time determining the needs of each animal for each phase of the animal's life cycle for about 40 basic nutrients. When nutritional research indicates how much of a given nutrient is needed in a given ration, both the feed manufacturer and the farmer who owns the livestock or poultry, have an economic incentive to provide animals with exactly the indicated amount of necessary nutrients for animal health. The result is a healthier animal. While most people don't know how many calories they consume in a day, feed manufacturers and farmers see that each farm animal receives almost precisely the correct amount of such vital nutrients as minerals, vitamins, amino acids, etc.

Many of the ingredients used in animal rations are agricultural by-products of other industries, such as cotton, rice, flour milling, meat packing and alcohol production. Many of these ingredients—high in animal nutrition value—would have little or no value to man were they not used to feed animals. Some of these products would create significant disposal problems were they not used as animal feed ingredients and had to be dumped.

MEDICAL AND SOCIAL BENEFITS OF LIVESTOCK PRODUCTION

Most of us are not aware that the farmer provides us with more than just a healthy, inexpensive diet. Animals raised for food are also invaluable in human medical treatments and in our every-day lives, by providing us with materials which make our lives easier and safer. Listed below, by contributing animal category, are just a few of myriad medical and social benefits provided to us by livestock production:

CATTLE:

MEDICAL CONTRIBUTIONS:

ADRENAL GLANDS:
Epinephrine is used to relieve some symptoms of hay fever, asthma and some allergies. It is also used as a heart stimulant in some crisis situations, and by dentists to prolong the effect of local anesthetics.

BLOOD:
Thrombin from cattle blood helps blood clotting, and is valuable in treating wounds to inaccessible parts of the body. It is also used in skin grafting.

LIVER:
Liver extract is sometimes combined with folic acid and injected to treat various types of anemia.

PANCREAS:
Perhaps the best known contribution, insulin derived from cattle pancreas is used to treat diabetes. Glucagon helps counteract insulin-shock.

Medical benefits derived from cattle by-products include rennet, epinephrine, thrombin, insulin, heparin, TSH, ACTH, cholesterol, estrogen, thyroid extract.

PRODUCT CONTRIBUTIONS USING CATTLE BY-PRODUCTS:

Tires
Antifreeze
Upholstery
Leather
Sports Equipment
Surgical Sutures
Soaps
Cosmetics
Buttons
China
Photographic film
Musical Instrument Components such as strings
Brushes
Explosives

SWINE:

MEDICAL CONTRIBUTIONS:

HEART:
Valves from young to full grown hogs are used in valve replacement surgery in humans, from infancy to old age. They are in some cases superior to mechanical valves because they don't stick and do not need the same level of anti-coagulant infusion. In the last 12 years, 250,000 lives have been saved through implantation of swine heart valves.

SKIN:
Due to its similarity to human skin, pigskin is used to treat massive burns and large accidental skin removal. Gelatin is used for capsules and pills.

THYROID:
Extracts are used to regulate the rate of metabolism in humans. Another extract is used to treat low calcium and phosphate levels and regulate heart beat.

PANCREAS:
Extracts are the source of insulin; even with synthetic insulin, there are an estimated 5% of all diabetics allergic to all but insulin from hogs.

Medical products from hog production include cortisone, Norepinephrine, plasmin, blood fibrin, heart valves, estrogen, relaxin, insulin, burn dressings, pepsin and oxytocin.

PRODUCT CONTRIBUTIONS:

Fabric printing and dying
Glue
Buttons
China
Fertilizer
Glass
Water filters
Floor wax
Rubber
Crayons/chalk
Antifreeze
Matches

(The above medical/social information provided by Women Involved in Farm Economics and the California Farm Bureau Federation.)

This book is published by the Animal Industry Foundation. The Foundation is a non-profit educational association dedicated to educating the American public on current agricultural practices. The Foundation intends that this book be used for educational purposes only.

OHIO HOLSTEIN ASSOCIATION

P.O. BOX 459
WOOSTER, OHIO 44691

TELEPHONE (216) 264-9088

June 2, 1989

The Honorable Charles Stenholm:
United States House of Representatives
Washington, D.C. 20515

Dear Representative Stenholm:

On behalf of over 2500 dairy farmers represented by the Ohio Holstein Association and the Ohio Purebred Dairy Cattle Association, I would like to register concern about H.R. 84, the Veal Calf Protection Act.

Ohio dairy farmers, many of whom are involved in veal raising, are competent custodians of the health and welfare of young calves. In order to make a profit in any agricultural enterprise, the farmer or rancher must consider human and animal safety. He or she must also consider expense, efficiency and animal health.

Modern dairy replacement and veal farmers raise healthier calves faster today than ever before. The modern veal or dairy replacement operations must keep death losses low, reduce debilitating diseases and encourage the fastest possible growth. Our national cow herd, both dairy and beef, has greater flexibility because more calves are living. Granted, new methods keep calves separated from adult animals, off grass and many times in individual pens or stalls, with good reason. Grass harbors internal parsites, adult animals are the major source of infective agents and individual pens eliminate scrotal or teat reflex nursing which can cause injury or infection. Although the proposed regulation specifically names veal calves, it would impact all who raise young bovines in controlled conditions. Those who have drafted this proposed legislation may not be aware of the current husbandry practices used by dairy farmers as well as veal raisers.

Often people anthropomorphize or give animals human characteristics. H.R. 84 falls into that trap, rejecting the ability of farmers to make the best possible decisions. The most astute legislation falls far short of the management skills already used by most livestock farmers and ranchers. Granted, there are those who are not capable of or willing to use good management practices. As experience with a number of social issues shows, not even the wisest legislation can effectively control all actions.

Rather than additional legislation, I would challenge you to consider higher funding for the Agricultural Extension function of USDA. Far better that a sound education program be enhanced than an expensive control program be enacted. Continue to help give farmers the recognition they need and the necessary assistance to continue to allow farming to be an effective way of feeding America.

Again, on behalf of the Ohio dairy farmers and veal raisers, I ask you to quickly dispatch of H.R. 84. Thank you for your assistance. If I can further help you understand the needs of the modern dairy and veal industry, please feel free to contact me.

Sincerely,

Gale Betterly

Gale Betterly, Ph.D.
Executive Secretary

Our office is located at 1375 Heyl Road

FROM JULIA CHILD'S KITCHEN
Julia Child Productions, Inc.
70 Seaview, Montecito Shores
Santa Barbara, California 93108
(805 969 3662)

June 2, 1989

Ref: HR 84

Representative Charlie Stenholm
Chairman, Subcommittee on Dairy, Livestock & Poultry
House Committee on Agriculture
1301 Longworth House Office Building
Washington, D. C. 20515

Dear Representative Stenholm and
Members of the Subcommittee,

I urge the Subcommittee to reject HR 84.

1. Undocumented scientific evidence. Veal calves are food animals. They are neither pets nor people. Quality veal producers in this country, the only kind that purveyors like Provimi and Plume de Veau work with, are very carefully controlled and monitored and only fine healthy calves are chosen for the market. The example shown in the Minneapolis television program "Misery on the Menu" showed the most inhumane and horrifying example of animal husbandry that one could possibly find.

This documentary is typical of the way television can be manipulated to show the worst side of an argument. To base a law on such a one-sided piece of evidence is patently ridiculous.

2. Misrepresentation of my views. When the documentary was proposed and when I was interviewed, I was led to believe that it was to be a real documentary showing both sides of the question and also how serious veal is raised. I had no idea that this was going to be a slanted, one-sided, inaccurate and misleading piece of propaganda. I was and am furious to have been a patsy to this scandalmonger.

3. Effect on cattle raisers. Any veal raiser faced with the problem of complying with this law would undoubtedly give up veal raising entirely, since it would be too difficult and costly. Perhaps, this is just what the proponents of the bill wish to accomplish!

4. Cost to US taxpayer. To comply with the regulations of the bill would cost the Federal government an enormous, almost unthinkable sum.

103 Irving Street • Cambridge, MA 02138 • (617 876 1072)
Bramafam-Pitchoune • 06740 Chateauneuf de Grasse • (93 67 10 56)

Page 2
Representative Charlie Stenholm
Subcommittee on Diary, Livestock & Poultry
House Committee on Agriculture

In sum, if this law is passed it will mean the end of prime veal in this country. I have had some of the so-called "numane" veal raised near Washington, and find it almost unpalatable. Parts of the leg are edible, but I spent $125 trying out every cut of this meat, and declare it is not veal. When cooked it turns out to be mystery meat, or baby beef, or just plain immature inedible calf. Chickens, pigs, lobsters, fish and all food birds and animals are raised in the most economical and humane way possible to feed our large population. If we allow bills like this to go through, soon there will be objections to lobsters, rabbits, and so forth. It's a doleful prospect and I trust this Committee will reject any such attempts to manipulate our farmers.

Sincerely yours,

Julia Child

NATIONAL
FARMERS
ORGANIZATION

Subcommittee on Livestock, Dairy,
and Poultry
Subcommittee on Department Operations,
Research, and Foreign Agriculture
U.S. House of Representatives

Statement of Charles L. Frazier
National Farmers Organization
June 6, 1989

H.R. 84 - Veal Calf Protection Act

We appreciate the invitation to offer our thoughts and recommendations on the proposal to regulate the production of veal.

The National Farmers Organization is composed of farmers and ranchers producing all the major food commodities. Our principal program is based on the collective bargaining concept in which we strive to obtain better prices for our members by providing certain services and marketing efficiencies in moving the raw commodities to the first purchasers.

The commodity operations are conducted primarily through three divisions specializing in dairy, livestock and grain.

Consequently, our milk producers are directly concerned with the potential for interference in the marketing of young calves posed by H.R. 84. Our members are mid-range in size; they customarily would retain dairy calves to grow out as feeders or move them to commercial veal producers.

To the best of my knowledge, no members of the organization are volume producers of veal utilizing the confinement procedures contemplated in this legislation. We are concerned, however, with the possibility that a substantial market for calves may be destroyed and the public may be denied the availability of a nutritious source of food domestically produced at reasonable prices.

COLLECTIVE BARGAINING FOR AGRICULTURE

As the members of your committees are well aware, the net income of dairymen has been reduced by lowered milk price support levels. The recent calf market has helped offset these losses on milk income. In addition to our economic interest in this market, there is a question of fairness involved for the large majority of veal producers who have cared for the calves in acceptable fashion.

Those of us in livestock production have always known that it is in our best interest to maintain healthy animals -- to care for them well -- and a great deal of effort and expense has been committed for that purpose. It would not be profitable to do otherwise.

Admittedly, there are some exceptions in all forms of human behavior. Witness the thoughtless treatment often accorded the less fortunate human beings and household pets in many of our urban communities. If there are identifiable cases of cruelty or neglect in feeding and handling of calves, those cases should be dealt with through State and local authorities as they have been for many years.

A substantial majority of Americans demand high protein foods. If we are deprived of this market by over regulation and expensive federal requirements, it is quite likely that food wholesalers will merely turn to foreign suppliers for veal. In that event, more U.S. farmers will be forced off the land. We are willing to care for little calves, but we consider it our first responsibility to care for people.

It is not necessary to add to the wide ranging duties and responsibilities of the Secretary of Agriculture as proposed in H.R. 84. We recommend that the bill not become law.

THE NATIONAL GRANGE

STATEMENT OF
THE NATIONAL GRANGE
PRESENTED BY
ROBERT M. FREDERICK
LEGISLATIVE DIRECTOR

BEFORE THE
HOUSE AGRICULTURE SUBCOMMITTEES ON
DAIRY, LIVESTOCK AND POULTRY
AND
DEPARTMENT OPERATIONS, RESEARCH AND FOREIGN AGRICULTURE
JUNE 6, 1989

RE: H.R. 84, THE VEAL CALF PROTECTION ACT

Family Farm Organization Serving Rural America

THE NATIONAL GRANGE, 1616 H STREET, N.W. WASHINGTON, D.C. 20006

Mr. Chairmen and the members of the House Agriculture Subcommittees on Dairy, Livestock, and Poultry and Department Operations, Research and Foreign Agriculture, the National Grange is pleased to present this statement in opposition to H.R. 84, The Veal Calf Protection Act. This bill would prohibit the use of certain practices in the raising of calves for veal, and other purposes.

The National Grange, which is this nation's first general farm organization, represents over 325,000 members in 42 states. Our members have been concerned for many years about the national, political movement known as "animal rights" because of the fervent support the movement is receiving from a wide range of diverse groups whose primary reason for organizing has little or nothing to do with how farm animals are raised. We are also concerned about the use of the term "animal rights", which Professor Harold Breimyer, professor emeritus and extension economist emeritus at the University of Missouri-Columbia, calls a "fraudulent phrasing of a human issue". Prof. Breimyer goes on to say, "Animal rights is a shameful misnomer. In transliterating the precious concept of human rights, it misdefines itself while debasing the latter." Dr. Breimyer brings some philosophical thinking to the issue:

> "The irony is that human beings developed the principle of human rights only after countless centuries of behaving little better than animals. Much blood was shed before it could be acknowledged that each living person, irrespective of class, color or ethnic origin, is endowed with certain rights. Those rights are 'inalienable'.
>
> "According to the Harper Dictionary of Modern Thought, human

rights are "those which men are conceived to have in virtue of their humanity..." We have them because we are human.

"Economist Kenneth Boulding complains of "trivializing" important matters. The animal rights people do not merely trivialize the human rights principle. They counterfeit it.

"All of which, however, is not to join in rejecting all concern for how the cattle, hogs, sheep and poultry of animal agriculture are cared for. Anyone who, as a schoolboy, heard his teacher read the story of Black Beauty and dropped a tear when the horse's owner beat the fine animal cannot be coldly indifferent. Warm, thoughtful human beings do not mistreat the species of the animal kingdom that provide them with recreation, drayage, and food."

The above outlines the Grange's greatest concern - that well minded people who are driven by fervor-pitched emotions that are fortified by counterfeiting animal rights into human rights will result in attempts to force livestock and poultry producers to raise their animals by legislative statutes rather than scientifically sound animal husbandry practices.

Mr. Chairman, our concerns are justified because today two subcommittees of the U.S. House of Representatives are holding a joint hearing on H.R. 84, which, if enacted, would dictate the animal husbandry practices that are to be used in raising veal calves.

For the first time in the United States, under the provisions of the legislation, a farmer could be found guilty of committing a crime for raising animals in housing that is not only scientifically sound but is held by many in animal science to be more humane than allowing the animals to be exposed to the extremes of climate, predation, disease, theft and bullying by larger, stronger animals.

To date, there has been little or no corroborated animal science data that supports the underlying premise of H.R. 84. In fact, research that was conducted at both Cornell University and Purdue University shows that veal calves that are raised in stalls are at least as humanely treated as are those that are raised in hutches, pens, or in open fields with some inherent benefits being derived from the individual treatment that is afforded by stalls. The arguments by proponents are based upon emotional, personal perceptions and misleading propaganda that misrepresents modern livestock production and the sincere concern that both farmers and ranchers have for their livestock.

Commercial veal production was introduced in the United States over 25 years ago and was patterned after the European methods of raising veal calves. Since that time, there have been countless improvements in husbandry practices that are used by American veal farmers.

Modern veal production starts on the dairy farm. The calves that are not kept by the dairy farmer for herd replacements are transported to a sale barn to be sold. At that point, a decision is made as to what type of veal they will become. Almost 20% are either fed grain for a short time before being slaughtered or are raised for mature beef. About 50% of veal calves become "bob" veal, and more than 30% of these young calves are purchased by veal farmers. The majority of veal products that are consumed are called special-fed veal and are raised on family farms using high technology methods. Almost all of the veal production in the United States is done by a husband and wife team, or a family team.

Veal calves are housed in well insulated barns and have supplementary heating systems which insure that they stay in a comfortable climate of 60 to 70 degrees during cold weather. The comfort of the calves is a major concern to the farmer, and extreme temperature fluctuations are avoided. Ventilation systems are designed to provide a minimum of 8 cubic feet of fresh air per minute for each calf in the winter and much more during the summer. Many newer operations have a form of air conditioning with the use of evaporative cooling systems.

Modern veal houses are well lit with either artificial or natural lighting through skylights or windows. Except during the hours of darkness, veal barns have sufficient lighting to observe each calf for the purpose of general inspection.

On a typical veal farm, the calves are brought directly from the sale barn to the veal barn where they are individually housed. Each calf is inspected a minimum of four to six times a day. With individual stalls, the calves' survivability is increased, there are less health problems, feed efficiency is better, and the problem with aggressive calves is eliminated. Once in his own pen, the calf has the choice to interact with his neighbor or to lie down and rest without being bothered. Individual pens help to reduce stress and allow calves to be more productive. Farmers have tried raising calves in small groups of 10 to 50 in open pens and have met with limited success. Three basic faults of the system have proven to be stressful to calves. One being the spread of contagious diseases and the increased need for antibiotics. The second is the environmental control problem of having the calves lying on straw bedding, thus causing a build up of fumes and gases from the manure in the bedding. Third, the problem of regulating the diet of each calf due to the social order that is created by the dominating-type calves that keep the smaller calves from the feeder. The larger calves often eat more than they should and get sick while the smaller calves must do without food.

The calves are tethered in their individual pen for their own safety. The common methods of tethering use a rope, strap, or chain to keep the calf in his pen. Many times after the calves become accustomed to their own pen, the tether is removed and is not needed. Without some method of restraining the calf in his stall, the farmer would be forced to go back to the old method of a "box stall". The old "box crate" has been replaced with an individual stall that is more comfortable. The design evolution of the individual pen has made it possible for calves to interact with their neighbors. By lowering the sides of the pens and by shortening the length of the sides, the calf is given more room in which to lie down.

Veal calves that are delivered to veal farmers are usually less than one week old and require a diet of milk, or milk replacer, in order to survive since their digestive system is not sufficiently developed to handle solid food. Veal feed is formulated with a mixture of milk by-products from the dairy industry, whey and whey protein concentrates from the manufacture of cheese, dried skim milk from the ice cream industry and a fat source from either animal or vegetable by-products. In addition, vitamins and minerals are added to make a feed formula that is more nutritious for the calves than whole milk. At feeding time, milk replacer is mixed in a bulk tank with hot water and is cooled to about body temperature. The feed is then pumped through a pipeline where each calf is fed according to its individual nutritional need. After feeding, the mixing and feeding equipment is sanitized.

Anemia is one health problem that farmers must prevent. Blood samples from the calves are regularly analyzed so the veal farmers can implement iron supplement programs. Twenty years ago, veal farmers in Europe thought veal calves must be kept anemic in order for the meat to be white. This myth has since been proven to be wrong. The diet of milk replacer products is the reason for the pale color of the meat. As more and more veal is marketed through grocery stores to consumers who are looking for meat that is lower in calories, less emphasis is being placed on the color of veal as has been the case in past years. The health and well being of veal calves requires close monitoring of iron requirements to prevent anemia. One of the first signs of anemia is loss of appetite. Calves that don't eat don't grow. Veal farmers cannot afford anemic calves; therefore, each calf is monitored on a daily basis to prevent anemia and their feed is supplemented with iron to meet their iron requirements.

Health management programs are of the utmost importance to the veal farmer. Veterinarians are regularly consulted for advice on preventing diseases. They work with veal farmers, thus establishing a vet-client-patient relationship where the needs of the calves are discussed and a health management program is developed and reviewed on a regular basis. Veal farmers use only government-approved medications and give careful attention to dosages, duration of treatment, and withdrawal time not only because their calves are inspected by USDA inspectors, but because they take pride in producing a healthy, wholesome product for the consumer.

The veal industry is an important part of the agricultural economy and directly benefits both the dairy and beef industries. Each year, veal farmers purchase more than $200 million worth of by-products from the dairy industry, which consists of $100 million in whey, $64 million in non-fat dry milk, and $30 million worth of whey protein concentrates. By marketing lighter weight animals as veal, more than 3.5 billion pounds of beef are not produced or placed on the market. This strengthens cattle and dairy cull cow prices.

The National Grange bases this statement on policy that was adopted by the voting delegates at our 122nd Annual Convention that was held last November in Redding, California. That policy is as follows:

ANIMAL RIGHTS

1. The National Grange supports the development of educational programs that demonstrate the advantages of modern animal husbandry and that opposes any legislation and/or regulations that would hinder good animal husbandry practices.
2. The National Grange strongly supports the livestock, poultry, and dairy industries as suppliers of the food and fiber that are so necessary for today's standard of living; therefore, we support the use of animals in animal agricultural research in order to advance the science of animal agricultural production in the most humane and economic fashion. We also support efforts to severely punish individuals and organizations that commit illegal actions against animal agricultural producers and animal agricultural and biomedical researchers and facilities.
3. The National Grange will strongly oppose legislation calling for the severe curtailment of the veal industry by such measures as eliminating confinement stalls and crates and the use of milk replacers.

Thank you for allowing the National Grange to present our position on H.R. 84. We strongly oppose the Act for the reasons stated herein and we firmly believe that H.R. 84 is unnecessary legislation that has been introduced and supported by well-intended members of Congress and various diverse groups who, in the words of Prof. Breimyer, are "transliterating the precious concept of human rights to animals."

NATIONAL PORK
Producers Council

WASHINGTON OFFICE
1015 FIFTEENTH STREET, N.W., SUITE 402, WASHINGTON, D.C. 20005
PHONE: 202-789-5606

Statement of the

NATIONAL PORK PRODUCERS COUNCIL

Before the

Subcommittee on Livestock, Dairy, and Poultry

and the

Subcommittee on Department Operations, Research and Foreign Agriculture

Committee on Agriculture

U.S. House of Representatives

on

Legislation to Prohibit Certain Practices in the Raising of Calves for Veal (H.R. 84)

June 6, 1989

Submitted by: Don Gingerich, President
National Pork Producers Council
Parnell, Iowa

NATIONAL HEADQUARTERS: P.O. BOX 10383 ■ DES MOINES, IOWA 50306 ■ PHONE: 515-223 [illegible]

I am submitting this testimony on behalf of the National Pork Producers Council (NPPC), which represents 100,000 pork producers and their families in 45 states which are affiliated with the national organization. NPPC is the largest commodity dues-paying organization in the United States and accounts for more than 90% of the nation's commercial pork production.

The National Pork Producers Council strongly believes in protecting the welfare of our animals and supports humane care practices. However, we do not agree with animal rightists who connotate human rights to animals. This is an important distinction--pork producers believe in working for humane animal welfare priorities, but do not agree that animals are entitled to human rights.

As an organization, and as individual farmers, we have reservations about H.R. 84, legislation to prohibit certain practices in the raising of calves for veal. This legislation, aimed at regulating humane practices in animal husbandry, threatens farmers across the nation, not just those raising veal calves. We believe that this measure would set an uncalled for precedent if Congress were to legislate on-farm practices of producing livestock. There are certainly better alternatives that would ensure that farmers would continue to have the right to manage their animals in a sound and proper manner. Moreover, the requirements in the proposed legislation will undoubtedly increase the cost of production which will be passed on to consumers.

The National Pork Producers Council has been very sensitive to the development of animal care issues for the last decade. More recently, in 1987, we formed a task force to direct pork producer programs on the animal welfare issue. We have been active with the Farm Animal Welfare Coalition, a group of agriculture associations working together to monitor this important issue. NPPC has also funded research to evaluate and improve industry production practices from a humane standpoint.

In March of this year, our animal welfare task force recommended that NPPC's executive committee delegates develop swine care guidelines on production practices. Pork producer delegates have approved this concept and development of these guidelines is underway. These guidelines will be used for the purpose of producer information, education and self-regulation.

We have also developed our own pork producers creed, which follows:

> "I believe in the kind and humane treatment of farm animals and that the most efficient production practices are those that are designed to provide comfort.

> I believe my livestock operation will be more efficient and profitable if managed consistently with good husbandry practices as known and recommended by the animal husbandry community.
>
> I believe in an open door policy to visitors to my farm, and to all those who are sincerely interested in production methods and the welfare of animals, so long as they do not endanger the health and welfare of my animals and do not interrupt my production routine or impair the production process.
>
> I believe in and will support research efforts designed to measure stress of farm animals and directed toward more efficient production of food and enhancement of the welfare of animals and man.
>
> I believe it is the animal's purpose to serve man; it is man's responsibility to care for the animals in his charge. I will vigorously oppose any legislative or regulatory activity that states or implies interference without responsibility."

Although we have supported legislative action regarding the care and use of research animals, we do not support H.R. 84, the proposed Veal Calf Protection Act. We are for those changes in production practices that have been shown to be scientifically sound, but question the prohibitions outlined in this bill. The requirements of the bill will also lead to unnecessary expense for farmers and the U.S. Department of Agriculture at a time when we need to curtail government spending to help in reducing the national budget deficit to balance the budget. New government restrictions would also be difficult, if not impossible, to police and enforce.

We support self-regulation of our industry as a means to address animal welfare issues, and oppose unnecessary regulation and legislation. Pork producers, like all farmers, understand that animals raised under stressful conditions that are considered inhumane will adversely effect efficiency of production. Our members are motivated not only for humane reasons, but also from a profit standpoint. More importantly, we as an industry do not condone the mistreatment of livestock, and take every opportunity to promote humane practices and report potential animal welfare violations to the appropriate authorities. The original caretakers of animals were farmers and that stewardship has not changed over the centuries.

Pork producers support the efforts of the House Agriculture Committee in providing a forum to discuss animal welfare legislation. With the help of this committee, I believe that we can continue to have agricultural operations that provide for the safety and welfare of our farm animals.

REAL VEAL

ANIMAL WELFARE INFO NEEDED !!!!

To: All RVI Service Reps

From: Robert Groenevelt

Date: April 25, 1989

Subj: Loose Housing Experiences

Renewed activity is taking place in California in regards to restrict veal calf raising to loose housing systems. If put into law, this could be used by animal rightists to enforce similar laws in other states.

Barb Huffman, President-Elect of the AVA, feels that the more negative stories we can produce in respect to past experiences of loose housing veal calf raising, the more chance we have to defeat this legislation in California.

WE NEED YOUR HELP !!!!

The following information is needed (MAKE THIS A PRIORITY!) before the end of this week. If not by mail, call in the info to Mike Friedli.

- The Growers Name
- Town and State
- When he/she raised calves in loose housing and how many total
- Main reason why he/she discontinued this system
- Mortality rate vs individual housing
- Health vs individual housing
- Medication use vs individual housing
- Any other helpful information

PLEASE start calling around to get as much info as feasible. We count on your fullest cooperation! OUR FUTURE MIGHT DEPEND ON THIS !!!!!!!!

THANK YOU VERY MUCH !

N8155 American Street, P.O. Box 347, Ixonia, WI 53036 • (414) 567-8989 • 800-558-0002 • 800-242-0138 (WI)

SUMMARY STATEMENT: ADAPTATION OF LIVESTOCK AND POULTRY TO CONFINEMENT

It is AVMA's position that swine, veal calves, broilers, and laying hens are adaptive, as evidenced by the performance and health achieved by confinement rearing. Confinement provides many opportunities to enhance the health and welfare of food animals, such as:

A. protection from adverse environmental conditions,

B. protection from predators,

C. provision of optimal nutritional requirements in quantity and quality,

D. provision of adequate, high quality water supply,

E. reduction of aggression,

G. enhanced capacity for observation and access when requiring care or handling,

H. greater control over health.

Good livestock and poultry producers are increasingly attentive to the welfare of the animals in their care. The vast majority combine scientific, moral, ethical, philosophical, and economic values, attitudes, and concerns. Their success depends heavily on the welfare of the animals under their stewardship. Most are professionals and well-educated in their field. Being specialists, they are even more in tune to what is required for the welfare of their charges than were their counterparts of the past. The trend toward professionalism in all aspects of livestock and poultry production, including a sensitivity to animal welfare, will continue.

E. Confinement rearing of veal calves has some unique advantages:

1. The animals, if housed and fed properly, in well ventilated buildings, with proper clean up procedures, are provided with excellent living conditions.
2. Good preventive medicine procedures can be implemented.
3. Observation of each animal on a daily basis is possible.
4. Calf losses due to disease are minimal.
5. Complete parasite control is possible.
6. It enables the industry to avail itself of one more phase of animal production.

B. **Feeding System**

1. Whatever feeding system is adopted, all calves should receive a daily diet which is nutritionally adequate to maintain health. It is vital that every calf receives colostrum as soon as possible after it is born, certainly within the first six hours of its life, and continued for three days. Thereafter, the calf should receive suitable food at regular intervals. When calves are fed in groups, and especially if feeding is restricted, there should be sufficient trough space or feeding points to avoid undue competition for food. After calves are weaned, fresh clean water should be easily accessible to them at least twice daily.

2. To facilitate adequate feeding, and to limit the spread of disease or vices, such as navel sucking, housed calves should be kept either in individual pens or in small groups.

3. Utensils used for feeding liquids should be thoroughly cleansed immediately after each use and disinfected daily by heat or with a dairy disinfectant approved under the Milk and Dairies Regulations, available from DHIA (Dairy Herd Improvement Association).

C. **Disease Surveillance**

1. The basis of a sound health program for a veal calf production unit is to establish a regular veterinarian-client-patient relationship. The veterinarian should be familiar with the veal calves and the production practices on each client's premises. The veterinarian should make recommendations for the health program and be responsible for the prescribed treatment regimen.

2. Managers must be taught to know the clinical signs which show that calves are not healthy. These signs include listlessness, loss of appetite, discharge from the nostrils or eyes, excessive salivation, persistent coughing, swollen joints, lameness, and scouring. In particular, calves should be watched carefully for signs of scouring and respiratory distress.

D. **Iron Level Monitoring**

1. Most animal feeds now prepared do have sufficient iron to maintain the normal amounts needed. It is necessary that the hemoglobin levels are normal or above to insure satisfactory weight gain and maximum production. The iron levels of calves should be monitored by hemoglobin determination on a regular basis in order to determine that animals are getting the right amount of nutrients to protect them from anemia. History of whether or not the animals come from iron-deficient areas, as well as anemic dams is beneficial.

2. Free choice or twice daily feedings are satisfactory. It has been well documented in veal production operations that bucket feeding does not lead to digestive problems.

essential. Expert advice may be necessary to ensure correct ventilation, temperature and humidity for the type of housing used. For housed calves it is essential to avoid conditions which could produce chilling, particularly for those up to four weeks of age.

7. When removing slurry from under slats, special care is essential to avoid fouling the air with dangerous gases which may be detrimental to man and animals.

8. Animals should be able to stretch, stand, and lie down comfortably. Calves may or may not be allowed to turn around, depending on management, housing and health.

9. It is recommended that veal calves kept in total confinement be kept on oak slatted floors. These floors are recommended because of the ease of the animal getting up and down, while also providing constant fresh air circulation in completely ventilated buildings. Sufficient research has been done to indicate that slatted floors do not cause or promote lameness. Workers have shown that the floors provide better traction. The fecal material can be washed daily through the slatted floors and there is little or no opportunity for the accumulation of fecal material that might provide incubation for pathogenic organisms.

10. Throughout the hours of daylight the level of indoor lighting, natural or artificial, should be such that all housed cattle can be seen clearly. In addition, adequate lighting should be available for satisfactory inspection at any time. Contrary to information circulated to the general public, it is recommended that calves be raised in well lighted areas. Adequate lighting and ventilation is recommended.

11. Essential mechanical equipment, such as feeding hoppers, waterers, milk dispensing machines, ventilator fans, heating, and lighting units, fire extinguishers and alarm systems, should be inspected regularly and kept in good working order. All electrical installations should be inaccessible to cattle and properly grounded.

12. The space allowance for calves housed in groups should be calculated in relation to the whole environment, the age of the stock, and the size of the group, and should be based on appropriate advice.

To: Mike Friedli
From: Milt Birringer
Date: May 1, 1989
Subject: Loose Housing Experiences

Norm Alsum, Route 2, Box 310, Brandon, WI 53919

1987 - 400 calves. Discontinued in 1988 and installed individual crates due to excessive mortality, poor grades, and poor feed conversion.

Russell Bathke, Route 2, Box 49, Wells, MN 56097

1986 - 500 calves. Converted individual crate facility to loose housing causing bankruptcy.

Danny Bond, Route 3, Box 111A Bond Road, Franklin, LA 70438

1984-85 - 10,000 calves. Discontinued this practice due to high rate of mortality, poor feed conversion, poor color and excessive use of medication.

Duane Carlson, Route 2, Box 114D, Marinette, WI 54143

1988 - 200 calves. New construction. Raised one group, discontinued, facility is empty. High mortality, poor feed conversion, unacceptable color.

urry Biedenbach -	Larry Biedenbach Rt. 1 Box 31-A Waterford, OH 45786 (614) 984-4563	Loss of Money Higher Mortality Use of More Medication Higher FC.
	Larry Schilling Rd. 1 Beverly, OH 45715 (614) 984-2958	"same as above" color problem Very uneven group weight wise. Some calves would bully themselves for the milk resulting in some good doers & bad doers

John Houtman - Hank Fernis
340 Tubbs Hill
Candor, NY 13743
(607) 659-5642

Loose Housing

4 groups - 130 calves each
shipped approx. 90 out of each group!
More Medication
Not doing well
Calves Stepping on each other
More lice & Ringworm
Sucking navels.
Licking each other
Equipment breakdown
uneven eating

With Pens

Mortality 2-3% now
Less Medication

Greg Koeppel - Wally Ward Rt. 1 Box 133 Porterfield, Wi 54159 (715) 789-2805	260 calves Likes Loose Housing / Doing Good!
Provimi Veal	When Greg worked for Provimi they were looking into Loose Housing - Scrapped Project!

arl.
cirkpatrick

Connie Moore
Rt. 1 Box 294-C
Washington, GA. 30673
(404) 678-1964

85-86' 3 groups - 60 calves
didn't work.
hard to medicate
Finish irraticate
Some good - bad
disease early
always group medication
mortality rate
treatment was difficult

Loose Housing List

Bill Baker - Al Carroll
N3516 C.T.H. C
MEDFORD, Wi 54451
(715) 748-5547

Lost Money
More Medication.

Gerald Woltz
5254 Forest Drive
Rib Lake, Wi 54470
(715) 748-5156

Lost Money
More Medication

Terry Seubert
R 1 PO Box 277-C
Dorchester, Wi 54425
(715) 654-5157

Lost Money
More Medication

Al Cordova
N7233 Blum Rd. Rt.5
Tomahawk, Wi 54487
(715) 453-3146

Only 20 calves Loose Housing
Likes it!

Clayton Warnish -	Levi Brubaker Rt. 2 Martinsburg, Pa. 16662 (814) 793-4366	Loss of Money High Mortality Poor F.C. Lot Dirtier Weights Very Uneven
	Mark Hostetter Rd 2 Box 630 Mohnton, Pa. 19540 (215) 445-7805	"same as above"

Rob Weis - Rob Weis
Rt. 1 Box 53-A
McIntire, Ia 50455
(515) 737-2618

1986 / group 45 calves
high death loss 35 calves
L Housing - Medication higher cost $20/calf
pens - 3% now now - $8/calf
L Housing - terrible F.C.

Steve Thering
Rd 1
Durant, Ia 52747
(319) 785-6432
(319) 785-6536

120 calves
3-4 groups
had pens / Large Housing
at same time
calves in pens always
did better
L Housing groups were
irratic in weights.

Bill McCarty - Danny Fitswater
Rd. 1
Canton, Pa

1985-1987
6 groups - 100 calves each
Made money on 1 group
High Mortality 15-20%
Color Problem
High Feed Conversion
High Medication costs

REAL VEAL

April 25, 1989

Dear Barb:

The following memo was sent to our service representatives by Federal Express today.

Hope it will produce results.

With best regards,

Robert Groenevelt
President

crf

Enclosure

Stanley Wright
Enosburg Falls VT.
05450
802-933 4718

2 machines

David Yoder Jr.
St. RT 5 Box 397
Aroda VA, 22709
703-672-4355

2 machines

Virgil White
St RT Box 22 A
Loranger LA, 70446
504-748-4870

2 machines

Elwood Wolfe
RD #1 Box 503
McClellandtown PA, 15458
412-737-5443

2 machines

John Wolfe
P.O. Box 256
Corriganville MD, 21524
301-724 8782

2 machines

Richard Van Opdorp
RD # 1 Box 435
Clifton Spring N.Y. 14432
315-462-3102

2 machines

Tom Vasta
RT 23 607-652 3580
Jefferson. N.Y.
2 machines

Bruce White
RD # 1
Harrison Valley Pa, 16927
814-848-9718

2 machines

Ron Thurber
RD # 1522 Ledge Rd
Basom N.Y. 14013
716-762-8575

2 machines

Bradford Tait
Box 506
N. Whitefield, ME 04353
207-549-5123

4 machines

Jack Turner
RD #1 Box 166
Roaring Branch Pa. 17765
717-673-5769

5 machines.

Sam Santini
Box 577
Stewartsville N.J 08886
201-859-5068

2 machini

Hans Slingerland
RT 579 Croton
Flemington N.J, 08822
201-782-1900

8 machines

Louise Simon
RD #2 Box 474
Knoxville Pa, 16928
814-326-4440

2 machines

Steve Quartuccio
RR #2 Box 175
Perkasie, Pa. 18944
215-795-2433

2 machines

Foy Quesinberry
RT 1 Box 186
Amelia VA 23022
804-561-2551

4 machines

Robert Remaly
5557 Snyder's CH RD
North Hampton Pa. 18067
215-837 6354

4 machines

GLEN Covey
611 Rockville Pike
Rockville MD. 20842
703-752-5618

3 Machines

DAVID Porter
RFD # 1 BOX 215
WESTFIELD MASS, 01085
413-862 4411

2 MACHINES

WILBUR PRICE
1584 ORCHARD RD
MT BETHEL PA.
717 897-6885

2 MACHINES

JAMES MILLS
RD # 4
WESTFIELD PA, 16950
814-367 2628

2 MACHINES

ANDY MUMMIKSMA
PORT COLDEN
WASH. N.J. 07882
201-689-3297

4 MACHINES

WILLIAM E MARTIN
RT #1 BOX 409
STANLEY VA, 22851
703-778-3118

2 MACHINES

Steve Marsh
RD #1 Box 60
Sevenvallie Pa. 17360
2 machines

Roger Mikels
RT 1 Box 196
Raphine VA. 24472
804-348-5929
2 machines

Kyle Miller
RT #2 Box 42
Stanley VA, 22851
703-778-3845
2 machines

Richard Long
8212 Rocky Ridge RD
Thurmont, MD 21788
301-271 4129
3 machines

Mervin Lapp
RD #1 Box 257
Worton MD. 21678
301-778-2577
5 machines

Justin Mangas
10-901 RT 3 RD 3
Leipsic Ohio 45856
419-653-8857
8 machines

Thomas Kaep
RD # 3 BOX 313
Phillipsburg N.J. 08865
201-454-6046
4 Machines

FRANK LONSE
RT # 1 BOX 120C
MT SAVAGE MD. 21545
301-264 3788
4 MACHINES

PAUL LEONARD
RD # 3
LIGONIER PA 15658
412-238-5158
2 Machine

CARL GRADY
Box ~~47~~
WINFIELD, PA, 17[illegible]
~~2 machines~~

DALE HOOVER
WEST VIEW HEIGHTS
MARTINSBURG PA. 16662
814-793 2657
1 machine

Kim & VERNON HAGAN
GA.
404-942 8188
942 7716
4 machines

JAMES HILTON
RT # 1 BOX 316
ATHENS, MAINE 04912
1 MACHINE 207-654 2811

ROBERT GERVASIO
RD # 1 CALIFON RD
LONG VALLEY N.J.
215-256-1035
6 machines
SOLD MACHINES.

LLOYD GRAY
NORWICH CONN.
203-642 7544
3 Machines

David Gray
RD # 2 BOX 581
Wyoming DEL. 19934
302-284-3974
4 machines

RON FRENCH
RD # 3 BOX 268
NEWFIELD, N.J. 08344
609-358 0415
HAD AT LEAST 20 machines
THAT he HAD in LABOR LEASE
OPERATIONS

JOHN FUSCO
7219 WALKER RD
UTICA N.Y. 13502
315-735-796
1 Machines

JOHN GARDNER
RT # 3 FRIENDSHIP RD
Douglasville, GA, 30134
404-942-0100
2 machines

DEAN DANIEL
RT 6 BOX 67
CHARLOTTESVILLE VA 29901
804-974 3928
2 MACHINES 2374

JOHN DIXON

DOVER DELAWARE

10 MACHINES

GEORGE ESSER
3801. N. FED. HWAY
POMPANO BEACH, FLA. 33064
305-498 5546

4 MACHINES.

DAVID CLARK
RD # 3
CUBA N.Y. 14727
716-437 5314
2 MACHINES

ROB CLEMENOW
VA. 703-234 8212

5 MACHINES

RUSSELL DUFFY
STAR ROUTE 13
MIDDLEBROOK, VA 24459
703-886-7738
4 MACHINES

JACK BURKETT
RD #1
IMLER PA. 16655
814-239-2964

4 MACHINES

ANDREW BEACHY
RD #1 BOX 117
WINFIELD PA. 17889
717-966-9133

4 MACHINES.

NICK CIRIGNANO
118 DEAN DRIVE
PERKASIE PA, 18944
6 MACHINES
LASTED 1 TURN OF CALLS

LAWRENCE BERNARD
RT #3 BOX 21
OAKLAND, MD, 21550
301-334 9250

4 MACHINES

DR. ROBERT BEAKE
BOX 324
STEWARTSVILLE N.J. 08886
201-854 3045

3 MACHINES

ROBERT BROWN
RD #2 BOX 546
PINE GROVE PA. 17963
717-345-3356

1 MACHINE

Richard Benedetto
22 W 11 St
Jamestown N.Y. 14701
716-484-1326

2 machines

Hunter Bowles
RT #3 Box 194
Mineral, VA. 23117
804-556-4524

4 machines

Roman Bicler
P.O. Box 28 RT 1
Christianna, PA. 17509
215-593 5103

2 machines

John Altomer
RD#1 Box 106
Stuyvesant N.Y. 12173
518-828 0061

1 machine

~~[illegible]~~ Hugh V. Anderson
4130 Pool Rd.
Winston GA, 30187
404 942-2692

3 machines

Richard Baylis
RD #1 Box 58
Quarryville PA, 17566
717-786-7586

3 machines

People who bought machines for 5/2/89
loose housing

Louis ALTomer
9864 Summonuct RD
STyuvsant. N.Y. 12173
518- 758-6766
10 Machines

DAN AshBy
RD #1
Milan PA 18831
717-596-3874
4 machines

William AshBy
RD #1
Milan PA 18831
717-596-3493
2 Machines

Ed Klco - Ed Klco
2104 Townline Rd.
Madison, OH 44057
(216) 259-3447

5/10/89

Barb,

Here are more names of people who tried loose housing - which it didn't work for the same reasons as the earlier lists sent to you:

Jim Savage	(419) 822-5755	Ohio
Judd Mangus	(419) 653-4143	
Charles Scott	(614) 924-4210	
William Scott	(313) 475-9896	- Michigan
Mike Billard	(815) 939-3298	Illinois
Bob Henricks	(815) 268-4592	
Wayne Dawes	(219) 639-6785	Indiana
Wendell Dawes	(219) 774-3642	
Ron Goodwin	(219) 733-2985	
Brown Brothers	℅ Roger Brown, Rt. 1, Box 239, Brook, In 479	
Ousley Barn (℅ Carl)	PO Box 657. Leesburg, In	

More Info. still coming in,
Mike Friedl

Wendell Lowe 219-774-3642
Scott Lowe - 219-774-3673

Real Veal, Inc.
Service Report

Name ____________________ Date ____________________
Room Number ____________________
Age ____________________ No. of Calves ____________________
Ounces of Powder __________ Incoming Weight __________
Pounds of Water __________ Quality of Calf __________
Hot Water Temp. __________ Mixing Temp. __________

Sanitation (Circle One)	Good	Average	Poor
Appetites (Circle One)	Good	Average	Poor
Barn Temperature __________			
General Health (Circle One)	Good	Average	Poor
Air Quality (Circle One)	Good	Average	Poor
Air Movement (Circle One)	Good	Average	Poor
Feed Chart Up-To-Date (Circle One)		Yes	No
Facilities Clean (Circle One)		Yes	No
Have Calves Been Deloused (Circle One)		Yes	No
Neck Chains Adjusted (Circle One)		Yes	No

Comments: Mike Trielli. Wendell Lowe had loose housing 3 yrs ago after Feed/C were poor 2.0 plus, mortality doubled, Med. more than doubled. They were forced to make a change back to individual housing or get out of the business. Some calves eat to much feed causing Bloat + death. very difficult to find which calf had scours, bedding was a problem more amonia, respiratory, navels, detection, Some calves did not eat enough feed, could not tell which ones until to late [illegible].
Ross Brinne also experienced the same problems.

WHITE - OFFICE COPY • CANARY - SALES COPY • PINK - REGIONAL MGR. COPY

Loose Housing
of
Special Fed Veal Calves
Update (1987)

by Terence J. Seubert, President
Seubert Calf Ranches, Inc.
Dorchester, WI

Editor's Note: This is a transcript of a presentation of "Loose Housing of Special Fed Veal Calves" delivered by Mr. Seubert at the 1987 annual meeting of the Livestock Conservation Institute, at the Red Carpet Hotel in Milwaukee, WI April 7-9.

The techniques used in the raising of formula fed calves is a primary concern of the animal welfare groups worldwide. These groups support the use of the loose housing system, while industry has proved that the individual stall system has very distinct advantages for the well being of the calf.

The loose housing system of raising calves dates back many years before there was a special fed veal industry. Loose housing mechanical automatic feeders were first introduced in about 1958, a few years before veal raising started in the United States. The loose housing systems have had a very high failure rate --- and that is a fact -- which it seems cannot be reversed.

It has taken many years to perfect a program to control disease, good environment and proper nutrition. This was the first and necessary step on behalf of animal welfare. The loose housing program is a method of veal production that has been misunderstood and mismanaged in the United tion to perfect a program for the loose housing of veal calves.

The disadvantages of loose housing systems include:

1. Transmission of disease is greater.

a. Calves drink from the same nipple.

b. Calves eat bedding which may be contaminated with urine and feces.

c. Calves lay on contaminated bedding.

d. Calves such each others' navels, thus ingesting urine from other calves.

2. Difficulty in detecting stress and disease.

a. Inability to see feces in the manure pack.

b. More difficult to observe calves individually.

c. Calves seemed to be more stressed from being full all the time.

3. Problems with bedding and manure.

a. Mechanical pneumonia caused by dust and mold particles in the bedding.

b. Increased respiratory disease because of the ammonia levels from the manure pack.

c. Manure pack is a natural medium for flied, maggots, and parasites.

d. The calves ingest bedding ach and intestines, thus causing digestive problems, lower dressing percentages and ultimately lower price.

e. The labor and investment needed for manure handling.

f. Because of increased liquid intake, humidity in the barn is often too high, which results in a higher percentage of respiratory problems.

4. Reduced control over feeding and handling.

a. Unknown amount of feed intake per calf.

b. More difficult to identify and treat stressed calves quickly.

c. Mechanical breakdown of the machine.

d. The overseer may be more lax because he thinks the calves are caring for themselves.

e. More difficult to handle calves for diagnostic purposes.

f. When trying to sort-off a calf for treatment, the whole barn gets very excited (calves slip, fall, bang into pen dividers).

5. Statistics: The effects of these disadvantages concerning the welfare and quality of special fed veal.

a. Greater amount of stress.

b. More scours and difficult to treat because of overeating.

c. 25% more health related problems.

d. Death losses are as much as

continued on next page

Loose Housing of Special Fed Veal Calves, Update (1987)

continued from last page

doubled.

e. Lower degree of finish.

f. Dress out percentage will be lower -- thus lower price.

g. Calves are not uniform in size, shape, color, finish. Again, calves are of less value.

h. Higher number of cull calves. The best that can be produced in Europe is a 7-10% cull ratio. In the United States the cull rate is 10-20%.

What We Have Done To Change The Problems Of The Loose Housing System

1. Eliminated the bedding and made slatted pens, this eliminated many of the problems.
2. Feed the calves a free choice mineral supplement.
3. Individually identify all calves with plastic ear tags.
4. Keep calves sorted in uniform lots.
5. Market calves as ready starting at 13 weeks and end the group at 16 weeks.
6. Some have been more successful by starting in stalls and moving to loose housing at 4-6 weeks of age.

Where Do We Go From Here

1. Loose housing systems are again declining.

2. The more successful operations are either

a. Small growers of 80 head or less

b. Growers who start the calves in the stalls for 4-6 weeks and then convert to loose housing.

continued on page 31

Agricultural Engineering

continued from last page

ground in two different directions.

***Branch or Secondary Conductors** are cables used to bond or interconnect metal objects to the main conductor system. This would include all gutters, plumbing stacks, mechanical equipment, metal water pipes, metal columns or beams,metal roofing or siding, and metal stanchions, stalls or door tracks. (The ground for other systems such as electrical and telephone service should also be bonded to the lightning protection system.)

***Lightning Arrestors** should be connected at the entrance points of electrical service to prevent a surge of voltage from entering the structure along these wires. Arrestors should also be attached to TV, telephone and other antenna lead-ins.

***Tree Protection Systems** should be used for any trees taller than the protected structure and within ten feet.

***Grounding Connections** may be the most important part of the system and are the parts most often damaged. For small buildings at least two copper ground rods (one-half inch diameter or larger) driven at least 10 feet deep in moist clay soil are required on opposite corners. Larger buildings need additional and larger ground rods depending upon soil conditions and size of the structure. Sand, gravel or rocky soils require special grounding systems.

On metal buildings the metal framework can be used as conductors for the lightning protection system if they are large enough, are electrically continuous, and effectively grounded. Metal covered buildings should be protected similarly to non-metal ones with the roofing and siding bonded to the conductors. □

Loose Housing

continued from page 19

I plan to remodel a barn which will have small community pens of 4 to 5 calves which will be fed twice a day. However, they may have to be tied for the first four weeks. This may be the only type of loose housing system that will not have a high failure rate.

Also, I do maintain the idea that if computer ID tags would be used and could be fed into a computer to give us more individual data on each calf, the mechanical feeder and loose housing would still have a chance of working.

Also, our company (American Feeds and Livestock Company, Inc.) will be doing much research this year on raising special fed veal without the use of antibiotics at subtherapeutic levels. Antibiotics in these test groups will only be used for treatment on individual basis if absolutely necessary.

In conclusion, animal welfare has been and will continue to be on the minds of everyone in this industry. It has taken many years of research and actual veal production to determine what the problems are and their solutions. The industry has met the challenges of proper health and nutrition, a better degree of livability and calf quality.

"At a time when everyone is being made aware of the welfare of all animals, the veal grower continues in his efforts to achieve and maintain the best possible environment for the calves in his facilities. He knows what the well being of those calves is reflected in their health and development and ultimately in the degree of success -- or failure -- of the growers' operation." □

Attachment No. III

Health and Abattoir Observations

The health of the calves during the trial was a rather variable situation and is somewhat difficult to put into perspective. The calves appeared to be quite healthy as a group when they were received but there were several individual animals that exhibited symptoms of acute upper respiratory infections.

Following treatment for the infections, the calves responded well and for the next few weeks were quite stable. No overt symptoms of illnesses were noted until about 4 weeks of age. At that time, numerous cases of pneumonia occured as a result of difficulties encountered in managing the humidity/temperature relationships.

The group clinical picture was not at all encouraging and there was considerable fear that there would be some deaths. The animals were treated for pneumonia and at the same time the environment was altered to reduce the humidity and elevate the temperature. The combination of treatments was quite successful and resulted in considerable alleviation of symptoms within a few days. No animals were lost as a result of the illness but a few were chronically affected.

Disastrous consequences were avoided in this instance only partly because of prompt medical attention and major alteration of the environment. Equally important was the fact that only 82 calves were involved and that an expert herdsman and a staff veterinarian were available to devote their attention to them. If 400 animals had been involved with less expert attention the results might have been different.

The health picture through the rest of the growing period was rather uneventful. One animal died, but the cause was not evident. Some animals contracted a fungus infection of the mouth but the problem was quickly reduced.

The abattoir observations were interesting and will require some future follow up to confirm certain conclusions. All the lungs exhibited evidence of past pneumonia with a wide range of involvement. Digestive systems were mostly normal but slightly larger than the usual veal calf.

Very few hair balls were present and most of the calves had none at all. The significance of this is not evident but it is a point requiring further investigation. Most organs were entirely normal in size and shape. Rib cages were enlarged and spread as compared to most veal calves.

Most rumens were distended and filled with an homogeneous mass of undigested straw and other material. The rumens were lacking in tone and rumenitis was prevalent. The walls of most rumens appeared to be stretched and thin. It appeared that the rumens were non-functional.

Further observations are needed on the digestive system and its functionality. Preliminary evaluation indicates that the availability of straw is detrimental to the animal but this is presently a one dimensional conclusion. Additional investigation will be made of this phenomena.

DL/jam

Attachment No. V

General Evaluation of the Trial

An overall evaluation of the trial in terms of success on value probably depends on the viewpoint of the evaluator. The Provimi viewpoint is that the trial was quite successful in terms of giving direction for subsequent experiments. This was the underlying thought from the very beginning. Provimi had earlier expressed the belief that a series of trials would be needed to develop a commercially acceptable system.

The problems encountered with environmental control very clearly indicate that the system for heating and air exchange cannot be a compromise. The choice must be between an open-ventilated unheated structure or a heated, control-ventilation structure. The feasibility of the open, unheated structure for veal calves has not yet been established in the upper midwest climate. This will be done, but the controlled-environment loose-house system will be evaluated first.

The particular feed formulation that will be most advanageous must also be determined, but this does not appear to be a "problem". The feeds used in the first trial both performed very well and produced some very fine animals. There was considerable variation in weight and finish however, and this factor will need to be put into perspective. It is likely that this is a management factor rather than a nutritional anomally.

Animal health in this particular trial was a mixed situation with some serious problems requiring drastic action. A high incidence of pneumonia occured but was controlled. It is a question as to how easily this control could have been accomplished on a production basis. We feel that health management is going to be a very important factor and that principles of prevention and control must be established.

Behavior, as an indicator of comfort or stress will be much more difficult to assay. The calf, like most domestic animals, seems to be quite adaptable and accepts rather amiably whatever conditions are available to him. This is true, evidently, as long as he is comfortable, well fed, healthy and treated with affection by the humans who care for him. The calves that were in both the loose-house and stall situations were well-attuned to humans and were very responsive to contact. It is obvious that the attitude of the persons caring for the calves is very important in the animals behavior and growth.

DL/jam

Attachment No. IV

Calf Behavior

Observations of the calves were made by a variety of people with different backgrounds and viewpoints. Conclusions on behavior can be summarized based on a majority opinion. The conclusion-reaching process was somewhat subjective; however, stall-housed animals were adjacent to the loose-house facility and a comparison could be made in general terms.

Many of the persons expressing opinions are experts in animal care and behavior and their comments are of considerable importance. Animal Science professionals from the University of Wisconsin, the University of Minnesota, the University of Illinois and two experienced Veterinarians observed the test. In addition a number of non-professional people interested in the humane aspects of animal agriculture made observations about the calves behavior.

A general observation from the professionals was that although the loose-housed calves were able to move about more freely, there was little evidence of different basic behavior from calves kept in stalls. Oral behavior was evident in both groups but specific acts were different because opportunities were different. Loose-house animals engaged in ear, navel and tail sucking while calves in stalls lick each other but little else. Many calves in the loose-house area were addicted to urine-drinking and sucking on urine and manure soaked straw. Animals in both situations chewed on whatever was available; boards, bolts, chains or any other item within reach.

Calves in the loose-house area of course were able to move about freely but observation indicates they spent most of their time lying down or standing. Many of the animals in the adjacent stall area were given this freedom also, but they took little advantage of it. They would leave their stall on occasion but always returned to it to sleep or stand and were very rarely observed outside of it.

When the animals were shipped there was very little discernible difference in their behavior. Personnel at the abattoir reported that they acted no differently than other veal calves. There was a difference in their locomotive ability at the time they were loaded on the trucks, but this difference evidently disappeared during the period in the truck.

Straw consumption was rather insignificant and appeared to be more oral-play activity than anything else. Post-mortem examination of rumens showed that some animals ate very little straw while other ate more. This aspect will be studied in greater detail since insufficient observations and study was made during the first experiment.

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Most notable in this group was a complete absence of bloating and scouring incidence. This is probably not an unusual occurence in veal operations but it does indicate a very stable feeding, health, and sanitation situation.

Ringworm was very prevalent in pen 1 and to a lesser degree in pen 2. There was very little incidence of this problem in pens 3 & 4. The reasons for this are obscure and will require some attention if a link to flooring method can be established.

Some minor injuries occured to the legs of some calves in pens 1 & 2. These injuries were mostly a result of the animals slipping off the bottom concrete slat. The number of injuries was important enough to warrant preventive measures. Either the slats should cover the entire floor area or a lip should be installed on the lower slat to prevent slippage at this point.

During the feeding period, free water was available at all times as was ground limestone. The calves habitually drank very little water and appeared to be able to adjust their intake according to need. The intake of limestone was variable and quite heavy with some individuals. There was practically no chewing of wood or urine drinking by the calves compared to the previous group. The provision of limestone obviously altered both these phenomena. The reason possibly can be attributed to the availability of calcium or some trace mineral in the limestone. The reasons for this apparent need is not obvious, however and will require further investigation.

There were fewer and smaller hairballs apparent in the intestines than is normally the case. This was also true of the first group of loose-house animals. The reason for this is not obvious. It may be purely a matter of other diversions being more available in the loose-house pens as compared with animals in stalls and thus less licking of coats occur. The presence or absence of hairballs seemed to be unrelated to any other factors.

The calves on the concrete slats had very little rumen development. About one half the straw-bedded animals had some degree of rumen enlargement, but no indication that rumens were functional.

About one half the 14 week-old group showed evidence of enteric infections. This abbatoir finding confirmed observations of abnormal manure after the 12th week. Medication could not be administered at that time because the anticipated shipping date was too close.

D. Blood Sampling - Chart No. 1 shows the pattern of changes in hemoglobin content of blood samples taken each week from all animals. The line labeled "Accumulative Average" represents the average of all samples received from the field.

2. The accumulation of manure, urine and straw in pens 3 & 4 provided a good breeding medium for flies. Large numbers of flies did develop in this area and caused a certain amount of annoyance to the animals and at least a potential for effects on growth. In contrast, there was no accumulation of waste in pens 1 & 2 and therefore no fly breeding at all.

The calves were generally cleaner in pens 1 & 2 and there was no opportunity for sucking or eating urine soaked straw. This kind of activity was not observed in pens 3 & 4 during this experiment but it did occur in Experiment #1.

B. Behavior - Behavior observations were quite subjective. We were mainly concerned with actions which were distinctly different from stall-reared calves or which might impact on a commercial operation.

Playthings in the form of a rubber tire and later an oil-soaked, straw-filled burlap bag were hung in each pen. The tire was of only moderate interest to them but the oil soaked bag was popular. This point is of interest mostly because it offers a possible way to prevent ringworm problems. The presence or absence of a plaything did not appear to be important to the animals.

A loose "pecking order" did seem to exist but it was obvious only during periods of general activity. Larger and stronger animals did force smaller animals away from the nipples at times. The effect of this could not be measured but it is a clear indication that it is important to provide sufficient feeding opportunity to all animals. The number of animals per nipple, access to the nipples and rate of feed flow are obviously important considerations.

Handling of calves for weighing or blood-sampling seemed to inhibit feeding activity. However, human presence and activity such as cleaning or adding straw seemed stimulating and feeding activity increased. This fact could be of some value in planning activities. However, it is unknown whether such stimulation actually increases total feed intake.

C. Health Observations - Generally speaking, the health of the calves was rather good. There was an incidence of pneumonia at about 2 weeks into the feeding period. There were a number of calves that were unable to respond to treatment and under commercial conditions would have been culled. These animals tended to elevate the cost of medical treatment and the average was $6.96 per animal in pens 1 & 2 and $7.46 per animal in pens 3 & 4.

B. Cost of maintenance of the two flooring systems will be based on records of time required for cleaning and costs of straw and straw removal. Some judgement of the need for a certain cleaning frequency will be made as it would relate to a production situation. This aspect will be more thoroughly assayed in Experiment #3.

C. Animals were weighed each Wednesday and blood samples were taken at the same time. Feed consumption was measured daily by weighing the amount required to fill the feeder hopper back to a fill line. Blood samples were analyzed for red cell count, mean cell volume, hematocrit volume, white cell count and hemoglobin level.

D. Behavior was evaluated strictly on a subjective basis with little attempt at a comparative approach. Observations centered on reactions to handling, utility of playthings, chewing of objects, sucking habits, urine-drinking and other obvious exhibitions. No attempt was made to enumerate activities or compare behavior to a model or set of expectations.

E. Observations were made daily of animal health and individual records kept for the duration of the trial. Medication used and results of treatment were also recorded. Evaluation of this area will also be subjective.

F. All animals were fed ESR and EFR on a solids-ratio schedule designed for those feeds. Daily feed consumption records were kept and a weekly conversion was charted. Evaluations of feed performance will be made on a comparative basis with the previous loose house performance and with existing field data on feed performance.

III. Results and Evaluation

A. Evaluation of flooring systems An important part of this experiment was the comparative evaluation of a concrete, slatted floor versus the straw-bedding system. The results of this comparison seem to be in favor of the concrete slatted floor for several reasons as follows:

1. Labor requirements were in favor of the slatted floor. About 1 hour per day was required for a daily scraping and hosing down of pens 1 & 2. The time required for adding straw and cleaning the front area of pens 3 & 4 was somewhat less than 1 hour, but 32 man hours were used to remove excess manure/straw during the test. The final clean-up of pens 1 & 2 required 14 man hours while the clean-up of Pens 3 & 4 required 32 man hours. In addition, the manure still will need to be spread on adjacent farmland. This cannot be done until the corn crop is harvested.

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STATEMENT IN SUPPORT OF H.R.84
THE VEAL CALF PROTECTION ACT

Submitted for the record of the hearings held before
the Subcommittee on Livestock, Dairy and Poultry
and the
Subcommittee on Department Operations,
Research and Foreign Agriculture
on June 6, 1989

by Diane Halverson
Research Associate for Farm Animals

I was born and raised on a diversified family dairy farm in southern Minnesota. My family milked Holstein cows, raised hogs and beef cattle for sale, and kept a chicken flock for family use. My father grew up on this farm also, and today runs the farm as a cash-crop operation.

When I was old enough I helped tend the farm animals, including the dairy herd, and baled hay, bedded cows and shovelled manure. Feeding the young calves was my favorite chore. My parents, my sister and I and many of our neighbors looked on raising animals and farming the land as a way of life we wanted to keep in spite of the risk, the long hours and hard work in the face of all types of severe weather, and the meager profits (or the losses) we experienced. I am well-acquainted with family farm agriculture, with a variety of animal husbandry practices and how the veal industry procedures contrast with those of a dairy and beef farm.

I have worked for the Animal Welfare Institute (AWI) since 1976 and for its sister organization, the Society for Animal Protective Legislation (SAPL), since 1987. In this capacity I have researched a wide range of farming methods, visiting research projects and farms across Europe and the U.S., with a substantial part of that research

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focussing on veal calf rearing. I have visited crated veal operations in California, Wisconsin, New York and Switzerland, and alternative loose-housing systems in Wisconsin, New Jersey, England, Virginia and Switzerland.

It is a mistake for the veal industry to cling to the charge that its critics are anthropomorphic "Bambi lovers" or that we speak out of ignorance of livestock farming or out of "sincere naivete", as opponents of H.R.84 did during the June 6th hearing.

I attended the hearing in full and would like to respond directly to several of the remarks made in oral and written testimony, and then comment on specific provisions of the bill. In order that the meaning of full quotes will not be lost, I have underlined salient points.

The formula-fed crated veal system and the market for white veal did not originate with American farmers, chefs, butchers or consumers. It was developed in Holland in the early 1950s by the Dutch company Provimi. Taking advantage of the cheap, surplus skim-milk powder exported from the U.S. to Europe, Provimi began manufacturing milk replacer for veal calves using skim-milk powder. Provimi also designed the crate system for confining calves.

The responsibility for bringing the commercial production of white veal to this country is claimed both by Provimi and by Berliner & Marx, a competitor of Provimi's. According to Provimi there was little demand for the meat in this country, and the veal had to be promoted heavily.

Now, after nearly 40 years of experience with the veal crate system all across Europe, and 25 years of hearings and debates in which experts submitted evidence about the science, economics and ethics of

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the system, formula-fed crated veal rearing has been prohibited in Great Britain, and the European Parliament has recommended to the European Community that the system be abolished. Partly because the system is very dependent on antibiotics, it is not used at all in Sweden. Germany is also phasing out the system. Now, after long experience and extensive deliberations on the scientific, economic and ethical aspects of this system which was developed in Europe, Europeans are rejecting it. It is unfortunate indeed that Americans didn't reject it too, in the first place.

One of the opponents of HR 84 appearing on the scientific panel (Dr.John McGlone) referred to the failure of a British loose-housing system tested in Wisconsin by Provimi, the Dutch firm that originated the formula-fed crate system in Holland and now has operations in the U.S.. I visited this installation with two veterinarians and two agricultural engineers from the University of Minnesota. Dr. McGlone said the loose-housing system Provimi set up failed. So did the crate system in the same installation. The scientists from the University of Minnesota submitted extensive comments to Provimi attributing many problems to the poorly designed ventilation system in this building. The crated calves in a section of the same experimental building showed a 30% morbidity rate (pneumonia) according to a Minnesota veterinarian who observed the calves. Both crated and non-crated veal and dairy calves across Minnesota and Wisconsin had severe respiratory problems that winter because of the unusually harsh weather. This Provimi experiment cannot be used to imply that all non-American loose-housing methods are unacceptable.

Furthermore, Provimi's experiment only changed one aspect of the

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formula-fed crate system, moving calves from individual crates into large groups of calves. It continued to deny calves of appropriate solid food and adequate iron, and dispensed food in uncontrolled amounts.

A second witness on the scientific panel (Dr.Stanley Curtis) testified that the health of formula-fed crated calves "is superior to that of calves raised in any other system with the exception of the calf hutch system." This claim means little in the face of a violative drug residue rate of 3.5% for formula-fed veal, and scientific research and extensive comments in veal industry literature (excerpted later in this testimony) about health problems and the need for drugs.

One of the veterinarians testifying in opposition to the bill stated, in response to a question from the Subcommittee, that HR 84's requirement that calves have room to turn around will so hurt the already narrow profit margin that the market for bull dairy calves would diminish to the point that these calves "may die in the gutter". This is an unlikely prospect. In fact, as stated by National Farmers Union representative Howard Lyman, bull dairy calves are selling for up to $200 each. Prices are high because of the competition for these calves from farmers rearing these calves as dairy beef. In fact, a veal grower and feed distributor is quote in The Vealer, September 1987, stating: "As far as the calves, it's hard to say when there's going to be enough heifers having enough calves to produce a surplus again....Many of our competitors that bid against us for calves are going for beef and that's raising the price and lowering the numbers."

REQUIREMENT FOR FOR SOLID FOOD

Formula-fed veal calves are denied solid food, and consequently never begin to ruminate, a normal part of the bovine's digestive process. Normally, calves reared on the cow at pasture, and dairy replacement or dairy beef calves separated from the cow and reared artificially, will begin to consume solid food and ruminate at 1-2 weeks of age, and at 2 months of age spend 6 hours per day ruminating (Porzig 1969). "...by ten weeks of age rumination time is similar to that of an adult" (Webster 1984).

Formula-fed calves are deprived of the chance to carry out natural behavior important to their health and well-being. The following points will show why we strongly support H.R.84's requirement for appropriate solid food for veal calves.

USDA Reports Violative Drug Residues in Formula-Fed Veal

In February 1984 and March 1984, *The Vealer* reprinted in two parts a speech delivered by Dr. Max Crandall, Associate Director for Surveillance and Testing, Food and Drug Administration, to the Regional Veal Seminar held at Cornell University. Crandall suggested that the prevention of rumination by denying veal calves solid food could lead to longer drug withdrawal periods than those being followed in the veal industry, since these periods had been determined by tests in ruminating calves:

> "It is quite possible that because the calves are not ruminating, the preslaughter withdrawal period on the label may not be adequate to assure the absence of above tolerance residues at the time of slaughter. Residue studies are usually done in ruminating animals."

> "At the present time the Bureau of Veterinary Medicine has an active Veal Task Force evaluating the use of drugs in veal calves....Specific data are needed to

> ascertain whether a drug approved for use in beef cattle and calves will react the same if given to veal calves which are maintained in confinement under specified feeding/nutritional and management controls."

A follow-up study released by the Center for Veterinary Medicine (CVM - formerly the Bureau of Veterinary Medicine) in May 1989, reports:

> "As a result of an increase in illegal drug residues in veal calves and concerns expressed by the veal calf industry, the Center for Veterinary Medicine requested the Division of Veterinary Medical Research (DVMR) to initiate studies to provide scientific data on drug disposition in preruminant and ruminating classes of calves....Sulfamethazine concentrations reached lower maximum levels and depleted quicker in the tissues of replacement calves than they did in bob veal and fancy veal calves" (see attached USDA-CVM summary).

Data from the Food Safety and Inspection Service (FSIS) reveals drug residue violations detected in 1988 were higher for veal calves than for any other class of calves. Antibiotic residue violations were 3.2%, or three times higher, for formula-fed veal, and sulfonamide residues measured .7% (see attached USDA-FSIS charts). According to FSIS, "because of residue problems that have recently been found in fancy veal, FSIS may implement a surveillance testing program for fancy veal similar to the bob veal surveillance program" (see attached FSIS summary).

Solid Food Decreases Health Problems and the Need for Drugs

Not only does the lack of roughage prevent the onset of rumination that would help avoid residues, it also exacerbates disease problems and actually increases the need for drugs. University of Bristol veterinarian John Webster and colleagues researched veal calf behavior

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and health for seven years, and found that an entirely liquid milk replacer diet

> "prevents normal development of the rumen and its microbes, thus predisposing the calf to infectious enteritis or problems of mechanical indigestion from displaced hairballs" (Webster, Saville and Welchman 1986).

A report from the Research Institute for Animal Production, in the Netherlands reveals that feeding roughage to calves in an experiment was originally meant to counteract boredom in the calves, but also had the effect of decreasing the number of hairballs in the rumen from "about 15 to nearly zero. The "number of animals with severe ruminal keratosis also decreased. Intensive investigations including about 1800 animals showed a lower morbidity of 50% in calves.... This applies especially to conditions of the respiratory system and to enteric disorders (van Putten 1986).

Other researchers agree that solid food is of considerable value in preventing the formation of hairballs in calves (Unshelm, Andreae and Smidt 1981). Even a long-time veal calf veterinarian concedes advantages to giving veal calves roughage:

> "When properly done, it will not affect the meat, helps to reduce stress, ulcers, mycotic (fungal) infections and it eliminates hairballs."
>
> -Dr. Robert Blease
> "Newsletter for Veal Raisers"
> Farm and Home News
> January 9, 1989

It should be noted that the formula-fed veal industry's mortality rate is maintained by lacing feeds with a higher dose of antibiotics than is normally found in the diets of dairy replacement calves.

According to *The Vealer*, June 1987:

> "....If it is known that the calves have had a good feeding of colostrum from healthy cows, initial medication may not be necessary. However, with anemic, relatively fat calves, it seems almost a must to have them on a constant low level antibiotic program.... Veal milk replacers usually contain broad-spectrum antibiotics at levels consistently higher than growth promoting levels found in milk replacers for herd replacements, and this regular low level of medication is used by many."

Is not the necessity of administering antibiotics and hormones an indication that the system is unsatisfactory and needs changing, that the animals have not "adapted" to the environment? (Kiley-Worthington 1983)

If we look at the widespread dependence on drugs, we can get a measure of the need for solid food, first to reduce the need for drugs, and secondly to reduce incidence of residues by allowing these calves to ruminate.*

Current industry literature and 1988 USDA reports indicate that drug reliance and drug residues are problems that have never left the veal industry, despite the repeated denials of the problem by industry defenders. The following excerpts will help illustrate this.

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*The presence of solid food fed ad libitum, (together with an artificial teat on which calves could suck) would also help to control the problems of cross-sucking, urine-drinking, wood-chewing and eating of manure ridden straw or feces if calves are kept in groups (Stephens 1981).

> 1)In 1978, a survey of veal growers conducted by University of Wisconsin students led to this report:
>
> Once in veal barns after a very large initial investment, the calves begin the feeding period.... This is where the feed companies come into the picture. The calves require a special feed so they will grow quickly in a semi-anemic condition so their muscle tissues will remain white or pink as a new born calf's muscle is.... The calves' semi-anemic condition may also add to [their] susceptibility to infection. The grower is equipped with a large arsenal of various antibiotics that would appear to be greater than that found in a veterinarian's office....This represents another major expense. Many growers fear increased government regulations on drug residues in the tissues that occur because of their use on the farm and that which the feed companies add to the starter feed. If in the future they would not be able to liberally use these varieties of drugs, they would no longer be able to grow veal calves....

> 2)Dr. Max Crandall speaking at Cornell University (reprinted in The Vealer, March 1984):
>
> "The recent action (March 16 & 29, 1983) of the U.S. District Court in Syracuse, New York emphasizes our concerns. As most of you are aware, the Court found it necessary to place four fancy veal producers in New York State under injunction on the basis of evidence that their calves contained the illegal, carcinogenic growth hormone diethylstilbestrol (DES) and they had marketed calves for slaughter containing violative residues."
>
> "....One complaint I often hear is that approved products on the market do not work, therefore, often times non-approved products are used....Other drugs such as chloramphenicol prescribed by a veterinarian have not been approved for use in food producing animals; there are no data to determine withdrawal times with any method of administration of this drug and USDA is now capable of finding chloramphenicol in the tissues of these food-producing animals and is actively involved in the screening for this drug, especially in calves."
>
> "FDA's Bureau of Veterinary Medicine recently made a survey on drug uses in veal calves. When the producers

kept written records of medicaments given to individual animals, some records were kept on the animal's pen. It appears that most drug administration was not reduced to writing....General findings of this survey showed that as many as 60 single or multiple drug combinations were being used to treat veal calves. There were reported instances of use of drugs not labeled for use in food producing animals, use of drugs labeled only for swine or poultry (nitrofurazone), and using drugs labeled specifically for use in cattle, but the label is lacking adequate directions for use in veal calves. These usages can lead to the introduction in commerce of illegal or violative residues that clearly adulterates the edible meat from these animals."

3) Dr. Richard H. Cockrum, DVM, The Vealer, April 1985:

"Veal calf raising is being hard-hit with drug residue problems and with the restriction of drugs that are allowable for use...Baby calves are pushed together, hauled and deprived of food for varying degrees of time. Temperature changes create severe stress so that when the calves are unloaded at your farm, they can be from excellent condition to near dead. At this time all calves need to be fed ample food as well as given vitamins, electrolytes and iron. Heavy doses of antibiotics and/or sulfas are customarily given at this time to treat or prevent bacterial infection."

4) from "Dr.John M.Wagner..A Real Veal Specialist"
The Real Veal Grower, December 1985

"....Also, the government has disallowed certain medications that we had the freedom to use with total impunity years ago that we can no longer use. That type of restriction, if it continues, is going to increase our cull and mortality rates."

5) "The Vet Sez:", The Vealer, April 1986. J.C. Gawthrop, a veterinarian whose columns appeared regularly in the magazine (and who testified in opposition to HR 84) "reluctantly" advised readers against the use of Ralgro, giving the impression that his primary concern was residue detection. Dr. Gawthrop noted that some veal growers were in fact using it:

"Ralgro is a growth promoting implant that has been used widely in the beef industry....The Food and Drug Administration has cleared the drug for use only in those types of animals listed. [Not cleared for use in formula-fed veal]....Ralgro causes several changes

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to occur in the veal calves that are obvious at slaughter....All of these changes are obvious on calves at slaughter. An inspector, who wanted to find problems, surely could....I have heard that some veal calves are being implanted. I cannot find fault with anyone who wants to grow a more muscular carcass more efficiently. However, I wonder if the improved efficiency is worth the risk of residue detection....Perhaps there isn't aggressive enforcement of the Ralgro ban in veal calves at the present time. I wouldn't want to implant calves one week and find out two months later that FDA is actively looking for evidence of Ralgro use in slaughter calves. I hate to see producers watch potential efficiency go to waste, but once the product is used it can't be taken away or hidden."

In response to this column, Dr. William Bixler, Associate Director for Surveillance and Compliance, Center for Veterirary Medicine, wrote The Vealer, July 1986:

"FDA is very concerned that a publication reaching so many users of animal drugs would print an article or opinion that shows unwillingness on the part of the writer to strongly oppose extra label use of animal drugs."

6) Alan DuVernay, publisher and editor, The Vealer, June 1986:

"In the area of drugs and biologicals, there are few products that are labeled for use in veal calves. The costs of obtaining label approval has become so high that it is easier for manufacturers to ignore labeling for our small use because the cost of doing so is very high. We then find ourselves in the gray area of using products we are told, and we believe, are safe but without the protection of having USDA label approval."

7) The Vealer, May 1987:

"The way Rick Wade sees it, his two-room veal barn is actually an animal hospital.

"Three times a year we bring in 720 new Holstein bull calves from sales barns in Ohio, New York, Maryland, Pennsylvania, and Wisconsin," explains Rick Wade, who runs Super Veal with his father Dick, at Wooster, Ohio. `They're stressed and have been comingled with other livestock, and have had the opportunity to be exposed to many types of disease.'

"The new calves, typically weighing from 95 to 120 pounds and running from three to seven days old, are

> accidents waiting to happen. They start scouring the first week to 10 days. They've gone without food for 12 to 48 hours and they don't even know how to drink their milk replacer...They've just been stressed and exposed to shipping fever. And, like clockwork, many are destined to get pneumonia...he constantly sees pneumonia draining dollars from other vealers in Ohio, Pennsylvania and parts of New York....It was in his sales capacity that Dick Wade first became aware of both the extent of the pneumonia problem in veal pens....` Every one of our milk replacer customers would get calves up to 35 days old and then start running varying degrees of respiratory problems.. You could go in there and use all kinds of medications, and they still would get hit.'"

> 8)The Vealer, February 1988, Land O'Lakes advertisement for veal calf feeds:
>
> "You begin by taking a risk. You have to assume every calf you buy is sick until proven healthy. After that things get even more uncertain. Each day requires a constant monitoring of nutrients and medication, water quality, sanitation and ventilation. At Land O' Lakes, we understand the risks a veal grower faces."

> 9)It appears that rearing formula-fed veal calves is so tricky, and feed salesmen so persuasive, that desperate growers will put almost anything into the veal calves. Writing in his regular column in The Vealer, Dr. Gawthrop wrote, December 1986:
>
> "I'm surprised at the claims that product representatives make which are eventually believed by veal growers. I have a client who fed drain cleaner to his calves at a salesman's suggestion."

Industry defenders point to weight gain as an indicator of calf health and welfare. Rapid weight gain is no assurance the calves are not suffering. With a high-fat diet and the liberal use of antibiotics, many calves will grow rapidly despite the stresses.

As the material discussed above indicates, veal calves are far from healthy animals. Many are rejected for kosher status because of health problems and abnormalities. According to Rabbi Abe Rine (The Vealer, January 1989):

"The conditions under which special feds are raised no

> doubt add to the inordinate amount of Trefah calves found among them. Their confinement and diet tend to make them more susceptible to lung abnormalities."

By providing solid food, veal growers would avoid problems with drug residues, first of all by reducing the need for antibiotics, and secondly, by rearing ruminating calves for which drug withdrawal periods are already established.

Providing solid food would also help to address the public's concern for the behavioral deprivation imposed on veal calves. As a scientific investigator of veal calf behavior has written,

> "One of the greatest disadvantages of intensive farming systems is the lack of occupation [activity] for the animals involved and this also applies to veal calves. Their crates with slatted floors are really barren....Sometimes veal calves cannot see out of their boxes at all because some fattening houses have no windows and artificial lighting is considered to be too expensive except during feeding times....Other bovines suffer less boredom than veal calves do, because feed intake and ruminating occupy the major part of the time. But veal calves have no opportunity for eating roughage or ruminating, and they manifestly miss this opportunity, because sham-ruminating can be observed for about two hours per day" (van Putten 1986).

REQUIREMENT FOR SPACE TO TURN AROUND

After seven years of concentrated study of veal calf health and behavior Professor John Webster and colleagues came to the conclusion that

> "*the most obvious insult to the welfare of the calf is to confine it in a box where, in the latter stages of growth, it cannot turn round, groom itself properly, adopt a normal sleeping position, or even stand up and lie down without difficulty*." (Webster, Saville and Welchman 1986).

Dr. de Wilt concluded that the crate is

> "*clearly unfavourable for resting and possibly also for sleeping*, due to spatial restrictions which not only interfere with the support of the head during lying, but also with the lying on the side or on the brisket with both hindlegs stretched and with comfort behaviours which are partly associated with resting, such as self licking and stretching." (de Wilt 1985)

The Vealer has acknowledged how strongly calves react against the crates, advising vealers to:

> "Check the new arrived calves frequently during the first day and night. They are frightened and homesick and *will go through all kinds of contortions to escape the confining stalls*."

It has been proposed that calves *never* truly adapt without suffering to prolonged crate confinement. Friend and Dellmeier suggest that "chronic frustration of a drive for locomotor-rotational exercise" could induce a state of "*learned helplessness*" in veal calves (1987).

There are many consumers who believe, without a scientific study to prove it, that the veal crate is inhumane. Calves have four legs and stand to nurse their mothers on the day of birth. They soon trot, run and kick, play with play with and groom each other. For many, this is evidence enough that a floor of wood slats, on which calves are forced

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to stand or lie in the same spot for four months unable to turn around, or adequately groom themselves, sleep comfortably or even walk is unacceptable and that H.R. 84 will help bring about a badly need reform.

REQUIREMENT FOR SUFFICIENT IRON IN THE DIET

Formula-fed veal calves are deprived of normal amounts of iron so that their muscle tissue will be light colored at slaughter. The light color of the formula-fed veal calf is supposed to mimic the pale flesh of a very young calf which has consumed only its mother's milk. Thus formula-fed calves are deprived of solid foods containing iron. Other possible sources of iron, including the water with which the dry milk powder is mixed must also be avoided or carefully monitored.

According to the Cooperative Extension Service, University of Massachusetts, the iron deficient diet and lack of grain or hay in the diet are stressful and contribute to poor health:

> The anemic condition resulting from milk-only feeding gives the desired lack of pigmentation to muscle tissues in the carcass. Milk is deficient in iron and thus a food source that will give the desired end product. Other feeds must be avoided, as they do contain iron. Trace mineral salt, hay, bedding are excellent sources of iron and must be avoided. Grains should also be avoided in the feeding program. Physiologically, this type of nutrition program results in marked stresses to the animals, especially as they approach 10 weeks of age....The calf does have stores of iron in the body at birth...this added storage iron can carry the calf pretty well through 8 to 10 weeks. However, by this time the calf is anemic and with a longer growing period, there is decreased energy utilization, decreased resistance to disease, decreased growth rate, and eventually death.

An article in The Vealer advises that calves are born with varying "hemoglobin or hematocrit levels...which will often result in dark veal". Consequently,

> "in order to obtain white veal in the majority of calves without penalizing baby calves born with low hemoglobin levels, a level of iron that is borderline, must be fed."
>
> -Jack Rovics
> The Vealer, March 1988

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In fact, Dr. Webster and colleagues at the University of Bristol concluded that

> "one cannot guarantee to produce 'white' veal without feeding a diet that will certainly induce anaemia in some calves".

Webster, et al suggested that the diet contain sufficient iron to "minimise the risk of iron-deficiency anaemia" though this would undoubtedly mean "that most of the veal would be pink" (Webster, Saville and Welchman 1986).

A similar recommendation was made by Professor R.G. Kauffman, Department of Meat and Animal Science at the University of Wisconsin-Madison:

> "...it is clear that calves should be supplemented with iron to prevent anemia and to maximize growth and healthfulness. There is no scientific evidence to support the production of light-colored veal. Admittedly, many consumers and chefs believe there must be an advantage, but it appears to be a figment of their imagination"(1982).

We strongly oppose the practice of risking calf health by feeding an iron-deficient, roughageless diet, and then severely restricting calf movement and behavior to help compensate for this abnormal feeding practice. It is particularly offensive since the sole purpose of this diet is to alter the color of the meat.

Members of the veal industry have even conceded color is unimportant, for example:

> "If you took two calves on the Provimi program and one was a little darker than the other, I understand that when you cook them up you can't tell the difference. I'm sure both would taste the same. It's just a visual thing."
>
> -Robert Codey, Provimi
> Sales Manager
> New York, November 5, 1979

> "It's all a psychological thing. If you put them both in a frying pan, they'll even look the same. The worst mistake we ever made was to sell this meat just on color."
>
> -Guy Tober, Provimi Vice-President
> *New York*, November 5, 1979

Dr. Max Judge, Purdue University, told a seminar of veal growers:

> "What does color mean in terms of palatability? I think *we have to admit that the consumer out there is not the person who is saying that this veal has to be light*. Survey results show that some consumers, admittedly, do look for light colored veal, but many of them don't know the difference. So if we were to tell them that this is veal in this package, unless it was extremely strange to them, I think they would accept whatever color was within this specified range we mentioned. But the industry has said that color is an evidence of youthfulness, and so-called white milk-fed color is an attribute that our meat must have.... However, we have an animal that, at three months of age, is undergoing some biological changes that are inconsistent with the conditions we would like to have - muscle becomes a little darker, the conformation changes, and the rumen tries to develop...There is no evidence that light colored veal is more palatable than dark colored veal; in fact, iron may actually improve palatability."
>
> -*The Vealer*
> November 1988

We urge Congress to legislate feeding practices that provide sufficient palatable roughage and iron to maintain each calf in full health and vigor.

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CONCLUSION

For many years we have awaited voluntary change by the veal industry and a commitment to the public to replace the extremely restrictive crates and provide healthful diets to the calves and wholesome meat to the consumer. But the veal industry remains largely unchanged, maintains that its methods are humane and wholesome, and has generally denied the need for development of environments and a diet that will maintain the calf in full health and vigor. It seems that necessity, in the form of legislation, will be the mother of invention. Even the industry's belated call for "scientific research" appears to be a thinly veiled plea for biased studies which would give "evidence" with which they could defend current methods. In a presentation to the American Veal Association (AVA) in 1988, then AVA President Eric Fleck said: "We want to be able to cite good, hard evidence that the practices that we as an industry advocate in the AVA Guide for the Care and Production of Milk-Fed Veal Calves are as healthy as the calves we produce."

In fact, scientific researchers across Europe have been investigating the health and welfare problems of formula-fed veal rearing for many years, inspired by the public concern about intensive farming that resulted from publication in 1964 of the book Animal Machines. Professor John Webster and colleagues at the University of Bristol have been leaders in this research, and have developed a housing system that is a vast improvement not only over crates, but over other forms of loose-housing that have been tried in the U.S. and in Europe. Webster, et al concluded that calves can be successfully housed in small groups if they have access to solid food, and are fed from a computerized feeder that recognizes individual calves and records their daily intake of feed and liquids. Under these conditions, calves in this "Access" system had far fewer problems with enteritis, respiratory disease, digestive and other disorders than calves in any other housing system they studied, including crated formula-fed calves. There were also fewer deaths and culls or losses to other disease. We suggest that the extensive body of research already published outside the U.S. on this subject be fully considered in developing alternative management systems, so that costly and unnecessary research that only delays change is avoided.

Also, we should note that while some in the veal industry claim all group-housing attempts have failed, others claim group up housing is working:

> "Today there are many operations which are raising calves in pens of 25 or 30. This was tried unsuccessfully in the first few years of the veal industry, but now technology has overcome many of these problems."
>
> -Dr. Robert Blease
> *Farm and Home News*
> November 14, 1988

The extensive work conducted in Europe on health and welfare has led the United Kingdom to enact legislation outlawing the veal crate. The British law, coming into force January 1, 1990, requires that the calf be a) "free to turn round without difficulty"; b) fed "a daily diet containing sufficient iron to maintain it in health and vigour"; c) have daily access to solid food so as not impair rumen development.

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After listening to expert testimony, in 1987 the European Parliament recommended to the European Commission that the veal crate should be abolished. In February 1987 the European Parliament stated that it

> "Believes that the present system of feeding calves on an exclusively liquid diet, while housing them in indivdiual crates, which deny them the opportunity to move or turn round, should be abolished in fvour of a system of group housing;
>
> Is of the opinion that a diet containing roughage and adequate amounts of iron, which would lead to a pinker coloured meat, would not only favour the normal development of a calf, but is not likely to create consumer resistance, especially if the consumer is made aware of the method of procution of white meat;
>
> Is of the opinon that a diet which does not contain roughage but consists solely of feed with insufficient iron content, resulting in 'white' veal is unethical and that such a rearing system should be prohibited in Community countries;
>
> Believes that legislation should be drawn up to achieve these changes, based on minimum standards which take into account the calf's need for a well ventilated environment, a balanced diet, adequate room to stand up, lie down, turn around adn adopt a comfortable sleeping posture, and that such calves should not be deprived of social contact with other calves after six weeks of age".

A final EEC directive on the subject of veal calf rearing is being prepared.

Germany has also adopted regulations dealing with the welfare of veal calves. Solid food will be required and after 1992 calves must not be kept in individual pens.

Some have called this modest bill a threat to the independence, even the survival, of the family farmer. But what could be more threatening to the veal industry's survival than the growing number of leading chefs and restaurants refusing to serve meat from calves deprived of the chance to turn around, and to sleep comfortably? What could be more threatening to a farmer's "independence" than enslavement to expensive, fossil-fuel-dependent, disease-prone, drug-dependent and inflexible farming methods?

In the words of an Ohio farmer and former *Farm Journal* editor, Gene Logsden:

> Maybe the animal rights movement is good for us.... I think farmers are being persuaded to paranoia over a movement that is going to do them more good than harm....Which is more a threat to your independent business as a family livestock farmer: animal rights or animal megafactories?....I have a lot more faith in veal farmers than to believe they can't find a way to raise calves without tethering them constantly in an enclosure too small for them to...lie down in, freely groom themselves or turn around.... Given a chance to buy food that obviously has better quality or is guaranteed clean of ag chemical and drug residues, people are opting to pay more for what they eat. For the farmer, this should be a momentous historic event. The smartest of them are working with the diet-dillies, organic nuts, and Bambi lovers to bring this beneficial attitude into the whole market. Therein lies salvation for the ag economy, not in ever-increasing diseconomies of scale that have brought farmers to their knees in the 80s."
>
> -Farm Journal
> January 1989

Logsden's is not the only voice in agriculture calling on the industry to get rid of crates. The editor of *Meat Processing* recently wrote:

> "Over the years, veal growers have tap danced around the problem, trying to blame the purveyors, who blame the chefs, who blame the consumers. Fact is, it won't be the end of the world if the public can't dine on so-called `white' veal, produced in part by restricting the

> movement of calves in veal crates....No less an authority than Ferdinand Metz, head of the prestigious Culinary Institute of America, told purveyors at a recent NAMP Marketing Seminar that `pink veal tastes exactly the same [as white veal]. There is no difference'....Thus confinement has no validity on the production side....Instead of fighting over whether it's bad, or how bad it really is, the entire industry --from grower to end user-- should unite in a public repudiation of the entire concept of confinement.....Why not come out publicly in favor of a humane alternative to veal calf confinement --whatever that may ultimately be-- and start reaping the results of the ensuing goodwill? The industry can and should take a tough stance on certain issues that its critics love to attack. But an unnecessary and outmoded confinement system isn't one of them."
>
> -Dan Murphy, Editor
> *Meat Processing*
> February 1989

Formula-fed veal calf rearing was once held out as being more lucrative than almost any other livestock industry. But, according to a writer for *Farm and Home News*, September 26, 1988: "Today, with the high bob costs, production costs --including feed costs and the finished market price hovering around $2.00, the return is not the fabulous `easy way to make big bucks' it may have been in the past."

Furthermore, the veal industry has set up a Catch-22. The industry establishes unnatural expectations for the calves' performance, and enormous obstacles for the calves to overcome, then severely deprives the calves when they cannot respond as the industry wants. For example, the industry wants calves to grow more quickly than normal in very stressful circumstances, so a high-fat, high-energy, roughageless diet is fed. But this causes calves to sweat heavily. Knowing that the calves will want to lick themselves more than usual but depriving calves of solid food which would ameliorate the

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problems of the hair intake, they chain and crate the calves so as to restrict the grooming calves crave to do. This doesn't make sense! This is not a system that deserves promoting or defending on economic or humane grounds. It is a ridiculous system that should be phased out and replaced with biologically sound and behaviorally appropriate ones. We urge Congress to support HR 84.

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CALVES
YEARLY SUMMARY CY 1990*
**RANDOM SURVEILLANCE BY SLAUGHTER CLASS

COMPOUND	BOB VEAL Samples	Violations	%	FORMULA-FED VEAL Samples	Violations	%	NON FORMULA-FED VEAL Samples	Violations	%	HEAVY CALVES Samples	Violations	%	TOTAL Samples	Violations
Chlorinated Hydrocarbons	[illegible]	0		271	0		248	0		83	0		851	0
Antibiotics	[illegible]	3	1.1	1359	43	3.2	1382	14	1.1	253	3	1.2	3182	63
Chlorinated Organo Phosphates	[illegible]	0		271	0		248	0		83	0		852	0
Sulfonamides	[illegible]	2	0.8	292	2	0.7	249	2	0.8	268	4	1.5	1067	10
Ivermectin	[illegible]	0		205	0		256	0		266	2	0.8	807	2
Benzimidazoles	0	0		257	0		226	0		0	0		483	0
TOTAL	[illegible]	5	0.5	2725	45	1.7	[illegible]29	16	0.6	953	9	0.9	7240	75

SUMMARY OF VIOLATIONS BY COMPOUND					
Penicillin	0	4	3	0	7
Streptomycin	[illegible]	6	5	0	13
Tetracycline	0	13	0	0	13
Neomycin	[illegible]	7	3	3	13
Oxytetracycline	0	6	2	1	9
Gentamicin	1	10	3	0	14
Sulfamethazine	1	2	2	4	9
Sulfathiazole	0	0	0	1	1
Sulfapyridine	1	0	0	0	1
Ivermectin	0	0	0	2	2

statement by U.S.D.A. residue experts May 23, 1989

Antibiotic Residue Findings in Formula-fed Veal - 1988

Prior to 1987, calves were considered as one slaughter class for both slaughter populations and residue sampling. In 1987, FSIS collected slaughter data on four calf classes: bob veal, formula-fed veal, nonformula-fed veal and heavy calves. Residue data was then collected in 1988 based on the 1987 slaughter distribution.

Formula-fed veal is defined as calves weighing between 150 and 400 pounds that are raised on a liquid diet up to the time of slaughter. Approximately 1.5 million calves in this class are slaughtered annually. This population represents approximately 1500 producers and 42 slaughter establishments.

The 1988 data showed 43 volations of 1359 kidney samples tested for antibiotics. This is a 3.2% violative rate in formula-fed veal. Kidney is the target tissue for antibiotic residue testing for monitoring. Since the veal kidney is edible, this constitutes a residue violation. The drugs found in order of predominance were: tetracycline (13), gentamicin (10), neomycin (7), oxytetracycline (6), streptomycin (6) and penicillin (4).

USDA/FSIS/ Information & Legislative Affairs

* April 26, 1989

RESIDUE TESTING FOR VEAL

The Food Safety and Inspection Service (FSIS), an agency within the U.S. Department of Agriculture, is responsible for assuring that America's meat supply is safe and wholesome. In meeting that goal, FSIS tests all species of animals for residues from drugs, pesticides, and other chemicals.

The two main types of residue testing that are done by FSIS are monitoring and surveillance. Residue testing is done at slaughtering establishments and from import shipments at the ports of entry.

Monitoring is designed to provide 95% assurance that a residue problem will be detected if the problem occurs in 1% or more of a species. Monitoring samples are collected on a random basis, and the testing provides profile information on the occurrence of residue violations on a nationwide basis.

A computer selects the slaughtering plants that will conduct residue testing on any given day, as well as how many animals are to be tested and which residues to test for in the animals. From the monitoring test results, FSIS is able to statistically determine what the nationwide violation rate is for a specific residue in each species of animal.

Monitoring of Veal. There are four classes of veal: bob veal, which are from one to three weeks old and weigh up to 150 pounds; fancy veal, or formula-fed veal, which are over three weeks old, weigh between 150 and 400 pounds, and are fed a liquid diet; grass fed veal, which are also over three weeks old, weigh between 150 and 400 pounds, but are fed a solid diet; and heavy or Western veal, which weigh over 400 pounds.

Of the 2.4 million veal slaughtered in 1988, 7,240 were tested under FSIS' residue testing program, or about 3.3 percent. This compares with 7,150 cattle tested of the 32.7 million slaughtered, or .02 percent.

The residue violation rate for veal in 1988 was 1.0 percent. In 1987, the violation rate was 1.4 percent. The most common types of violative drug residues found in veal calves are from antibiotics, such as tetracycline.

Surveillance testing is conducted when a residue problem is detected — either through monitoring results or through other information received by FSIS. Surveillance testing is designed to investigate and stop the movement of potentially adulterated products into commerce.

Under surveillance testing, the sampling is biased, unlike the random sampling done under monitoring. Therefore, surveillance testing results cannot be reported as a nationwide violation rate.

Surveillance testing for veal. Because of past abuses of sulfa drugs in bob veal calves, FSIS is conducting special, intensive drug residue testing of bob veal. CAST, or Calf Antibiotic and Sulfa Test, detects the presence of antibiotics and sulfa drugs. CAST is a rapid test that can be conducted on-site in bob veal slaughtering or processing plants. Any violation found under CAST results in immediate condemnation of the calf.

In 1988, CAST was run on 180,728 bob veal. Of those, 3,095 were found to have positive levels of antimicrobial drugs, and the animal carcasses were immediately condemned. While the tests were being run, the carcasses were held at the slaughtering plant.

In 1987, CAST was run on 195,867 bob veal, with 3,380 found positive for residue violations. Approximately 1.3 million veal were slaughtered nationwide in 1987. Before CAST was implemented in 1984, antimicrobial violations in bob veal under the monitoring program were approximately 7 percent.

The level of surveillance testing that is done in each veal slaughtering plant is based on the number of violations found in each individual plant. If a plant has very few drug residue violations in veal calves, perhaps only 1 or 2 percent of veal will be tested. Other plants, who have had numerous violations, are required to have 100% of the veal passing through their plant tested.

CAST is not run on fancy veal calves because USDA regulations currently only permit the test on bob veal. However, because of residue problems that have recently been found in fancy veal, FSIS may implement a surveillance testing program for fancy veal similar to the bob veal surveillance program.

SUMMARY DOCUMENT

STUDY TITLE:

Chemotherapeutic Agents and Their Disposition in Food Producing Animals. I. Disposition of Sulfamethazine in Tissues and Plasma of Bob Veal, Fancy Veal and Replacement Calves After Oral Administration.

STUDY NUMBER: (290.1) (290.01) INAD No. 4265

BRANCH: HFV-510

INITIATION/COMPLETION DATES: August 23, 1984 - February 26, 1988

AUTHORS:

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OBJECTIVES:

A. Investigate tissue and plasma concentrations and depletion of orally administered sulfamethazine in bob veal, fancy veal and replacement ruminating calves.

B. Examine disposition of drug to evaluate possible differences/similarities in drug absorption and depletion rates among the three classes of calves.

CENTER MISSION RELEVANCE:

As a result of an increase in illegal drug residues in veal calves and concerns expressed by the veal calf industry, the Center for Veterinary Medicine (CVM) requested the Division of Veterinary Medical Research (DVMR) to initiate studies to provide scientific data on drug disposition in preruminant and ruminating classes of calves. Information gained from these investigations, contribute data regarding behaviour of sulfamethazine in calves, its persistence in tissues and plasma and support CVM regulatory action regarding therapy and safe use of sulfamethazine in bob and fancy veal calves.

SUMMARY OF RESULTS:

Sulfamethazine concentrations reached lower maximum levels and depleted quicker in the tissues of replacement calves than they did in bob veal and fancy veal calves. Data summarized below show average ppm levels at day 1 and day 7 in liver tissues, with one day 7 fancy veal calf omitted.

	Day 1	Day 7
Replacement	35.77	0.03
Fancy Veal	78.5	0.39
Bob Veal	106.5	0.36

Data in Table 1 of this report indicate that two 14 day and two 10 day withdrawal fancy veal livers contained more than 0.10 ppm sulfamethazine. Sulfamethazine levels were below 0.10 ppm in all day 5 replacement livers. See Table 8.

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TESTIMONY

on

H.R.84

THE VEAL CALF PROTECTION ACT

before the

SUBCOMMITTEE ON LIVESTOCK, DAIRY, AND POULTRY
of the
HOUSE AGRICULTURE COMMITTEE
U.S. HOUSE OF REPRESENTATIVES

Submitted for the record by John F. Kullberg
June 16, 1989

THE AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS
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The producers claim that these practices are actually beneficial to the health and welfare of the animals and that the industry should be left to self regulation without government intervention. The facts do not support this self regulation appeal. After hearing from scientists, veterinarians, and humane veal calf producers, I am convinced that these animals can and must be handled in a more humane fashion during their short lives and that the American public deserves to be able to purchase veal free of drug residues. The current practice of confining a calf to a small crate with no room to move, turn around, groom itself, or even sleep in a natural, comfortable manner is unneccessary and cruel. Producers claim that they house animals in this way to make it easier to give individual attention to the animals, to chart their growth, and to treat illness and administer medication. The truth is that the animals are crated to inhibit their ability to move about and develop muscle tissue through exercise and that they are routinely given prophylactic quantities of antibiotics to ward off illness that would likely attack an animal maintained in this weakened state.

The calves are fed an iron-deficient diet of a liquid milk replacer made of skim milk, fat, and in most cases high levels of antibiotics. Producers claim that solids and roughage are unnecessary and that the animals must be fed a low iron diet in order to produce a white meat that commands a higher price at market. Producers say that the calves are only babies and that they are unable to digest solids. But the fact is that if these same animals were raised for beef or as dairy animals they would be allowed to eat solids and roughage and even be able to move around.

It should also be noted that in the past few years the veal industry has advertised white "fancy" veal as a low fat, healthy alternative to artery-clogging red beef. Recent reports, however, of unacceptably high levels of drug residues in " fancy" formula-fed veal have called into question current farming practices. According to a recent study conducted by the U.S. Department of Agriculture, drug residues found in meat from formula-fed veal calves was greater than three times that found in the meat derived from other veal calves. And the U.S.D.A. has expressed serious concern about this statistic. The problem of high residue levels in formula-fed veal calf meat might come in part due to the non-ruminating nature of the animal. As discussed earlier, fed a liquid only diet, these calves metabolize nutrients and antibiotics differently from an animal fed solid foods. Food and Drug Administration studies have shown that safe drug withdrawal times in ruminating and non-ruminating calves is different. In fact, just last month the FDA advised the industry that "no drug, not a single drug...is specifically approved at this time for use in fancy veal." If no drugs are approved for use with these animals then why are there unacceptable residue levels in the meat? If the American consumer demands accountability of automobile manufacturers, clothing manufacturers, and other foodstuff providers, they certainly deserve to be able to purchase antibiotic-free meat!

Passage of H.R.84 will do much to help, not hinder the veal industry by setting minimal humane standards of care for the animals. In addition, the American public is growing more and more concerned with the safety of our food supply and is becoming leery of the chemicals and drugs used in production. With passage of this bill veal calves will be fed a sufficient supply of digestible solid food and iron to maintain them in good health, producers will find it unnecessary to depend on drugs to keep their animals alive, and the American public will gain confidence that the final product is safe.

I presume that many will find this testimony predictable, given my position as president of a major humane society. If I may, therefore, I would like to conclude with an editorial entitled, "Achilles Heel on Veal", by Dan Murphy, an editor of a major meat industry publication, MEAT PROCESSING/February, 1989. I believe this testimony is nothing short of eloquent:

> "Once in a while, it's rather refreshing to focus on an isolated problem that can actually be solved by direct action. It's even better when the ripple effect of a resolution would carry far beyond the initial outcome.
>
> Such is the case with the issue of veal calf confinement. Over the years, veal growers have tap danced around the problem, trying to blame the purveyors, who blame the chefs, who blame the consumers. Fact is, it won't be the end of the world if the public can't dine on so-called 'white' veal, produced in part by restricting the movement of calves in veal crates. Nor will the market for veal be shattered. Its culinary appeal and nutritional superiority will continue to attract legions of customers--no matter what the color

of the product. No less an authority than Ferdinand Metz, head of the prestigious Culinary Institute of America, told purveyors at a recent NAMP Marketing Seminar that 'pink veal tastes exactly the same [as white veal]. There is no difference.'

Thus confinement has no validity on the production side. The animal activists have made damn sure that point has been driven home with scores of state legislators and congressmen, and more legislation is on the way in California, where Assemblyman Tom Bates is reintroducing his 'veal calf rights bill,' and in New York Bates' bill would be a mini-nightmare of ill-conceived regulations on veal growers. But how do you oppose him? How do you come out in favor of confinement without sounding like a villain? The answer is, you don't.

Instead of fighting over whether it's bad, or how bad it really is, the entire industry--from grower to end user--should unite in a public repudiation of the entire concept of confinement. Granted, as Temple Grandin points out in a thoughtful article on animal welfare in this issue (page 64), group housing units are not yet perfected. More experimentation would have to be done. But why drag it out any longer? Why load up the animal activists' shotguns with a fresh round of shells every time the industry slinks around the problem? Why not come out publicly in favor of a humane alternative to veal calf confinement--whatever that may ultimately be--and start reaping the results of the ensuing goodwill? The industry can and should take a tough stance on certain issues that its critics love to attack. But an unnecessary and outmoded confinement system isn't one of them."

Statement on HR 84,
the Veal Calf Protection Act of 1989

Submitted for the Hearing Record of June 6, 1989
By the Livestock Marketing Assn.
of Kansas City, Missouri

The following statement is being submitted by the Livestock Marketing Association (LMA) and represents our members views in opposition to HR 84, the Veal Calf Protection Act of 1989.

LMA, headquartered in Kansas City, Missouri, is the national trade association for businesses which market livestock. Its nearly 1,300 members, across the U.S. and Canada, include livestock auction markets, livestock dealer/brokers, commission companies, marketing cooperatives, transporters, stockyard companies, feedlots and financial institutions.

LMA shares with the producers who market their animals through our marketing businesses a common interest in the welfare of all animals. The proper handling of animals whether it is on the farm or at the auction market is in the best interest of us all -- for reasons of humaneness as well as our economic livelihood. A sick, stressed, or mistreated animal brings neither the producer nor the market business top dollar for its labors. Neither does an inhumanely treated animal leave our businesses with the kind of public and business reputation we need to be successful.

LMA has worked to improve livestock handling long before the animal rights movement became part of the popular culture. A number of years ago, we adopted a Code of Marketing Standards and Principles. Part of that Code "pledges our members to provide humane livestock treatment." Also, in further recognition of the importance of practicing proper handling of livestock, LMA is developing video tapes on proper handling procedures for livestock at auction markets, stockyards, etc. These video tapes will serve as a valuable training tool for our market workers. With this training, we can better assure that proper livestock handling methods are followed to avoid stressed or mistreated animals.

Unquestionably, the vast majority of producers and marketing businesses strongly believe in giving the animals they handle proper care and treatment. For that very very small minority who do not, and we all recognize that they exist, they can't hope to survive for long in today's competitive business atmosphere or in a society that demands humane treatment of animals.

As far as LMA can determine in studying the history of this bill, it is based on sensationalized stories of abuse in the veal industry with little or no real evidence to support its far-reaching implications. We strongly urge the Committees to think carefully before enacting such a wide ranging piece of legislation upon which their is little or no basis for doing so.

Certainly, we could agree that their is very little scientific information upon which to establish mandatory Federal standards on animal production methods. Without sound scientific support for what constitutes appropriate production methods in the veal industry, it is, in our judgement, premature to extend the long arm of the Federal government onto the farm and require that certain unstudied methods be followed.

Likewise, it seems unwise to us to establish another immensely costly Federal program at a time when there are few extra dollars to go around. Sufficent grounds upon which to establish a large Federal inspection force adequate to properly monitor the entire veal, dairy, transportation and marketing industries in carrying out this legislation, in our view, simply do not exist at this time.

The veal industry is recognizably an important segment of the livestock industry. To establish arbitrary standards of production would have a very severe impact on not only the veal producer but its subsidiary businesses as well. This obviously includes the marketing sector that LMA represents.

In particular, Section 3(b) of HR 84, would make it "unlawful for a person to knowingly transport, sell, or purchase a calf which was kept or fed in violation of the subsection (a) . . ." of the Act. Were this bill not onerous enough, this provision gives insult to injury by requiring our auction markets to carry out one more impossible Federally mandated task in conducting its daily business affairs.

We don't have to explain how the livestock marketing system works in this country to convince the members of the committees that the previously stated provision is both unworkable as well as unenforceable. Short of extreme or obvious signs of mistreatment, our marketing businesses are hardly in a position to know or be able to monitor the daily production practices of all the producers from which they buy and sell calves throughout the United States.

It is for these reasons, that LMA strongly opposes HR 84. We feel that this particular legislation is neither needed nor appropriate in addressing the problem for which it was intended. Thus, we respectfully request that the Committee take no further action on this bill.

Thank you for your consideration of LMA's views on HR 84, the Veal Calf Protection Act of 1989.

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May 22, 1989

The Honorable Charles Stenholm
U. S. House of Representatives
Washington, DC 20515

Dear Rep. Stenholm:

I am writing to you in opposition of H.R. 84, dubbed "The Veal Calf Protection Act", which was introduced by Rep. Charles Bennett, D., Fl.

It is important to recognize that dairymen and all livestock producers including veal producers, with extremely few exceptions, are very conscious of the well being of the animals for which they are caring. There are educational channels thru the Agricultural Extension Service that can reach people needing help without criminalizing a procedure for raising veal calves which serves the well being of the calf and permits the veal industry to remain an economical food producing industry.

The raising of any animal or agricultural product requires the best care in order to make a profit. The inspection provisions of the legislation would cost U.S.D.A. hundreds of millions of dollars to enact and enforce. Farming would become extremely labor intensive and costly and raise animal food products beyond the reach of many consumers. Most farmers simply wouldn't make a profit and would be forced out of business.

H. R. 84 clearly is not in the best interest of the animal or the farmer. The Maryland Holstein Association, 800 members, strongly opposes legislation as that proposed in H. R. 84, "The Veal Protection Act".

Sincerely,

John L. Morris

John L. Morris, Sec-Treas.

Holstein Association

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STATEMENT OF THE HOLSTEIN ASSOCIATION OF AMERICA AND THE NATIONAL PUREBRED DAIRY CATTLE ASSOCIATION TO THE SUB-COMMITTEE ON LIVESTOCK, DAIRY AND POULTRY AND THE SUB-COMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH & FOREIGN AGRICULTURE OF THE HOUSE AGRICULTURE COMMITTEE WITH REGARD TO H.R. 84, THE VEAL CALF PROTECTION ACT OF 1989

Presented by:

Donald V. Seipt, Easton, Pennsylvania
Vice President, Holstein Association of America
Vice President, National Purebred Dairy Cattle Association

June 6, 1989

STATEMENT OF THE HOLSTEIN ASSOCIATION OF AMERICA
AND THE PUREBRED DAIRY CATTLE ASSOCIATION
TO THE SUB-COMMITTEE ON LIVESTOCK, DAIRY AND POULTRY AND THE
SUB-COMMITTEE ON DEPARTMENT OPERATIONS, RESEARCH & FOREIGN AGRICULTURE
OF THE HOUSE AGRICULTURE COMMITTEE
WITH REGARD TO H.R. 84, THE VEAL CALF PROTECTION ACT OF 1989

I am Donald V. Seipt, a dairyman from Northeast Pennsylvania. With my family we operate a farm that supports nearly 100 milking cows and, with young stock, a total herd of 200 Holstein dairy cattle.

As Vice President of Holstein Association of America, I am speaking for and on behalf of over 46,000 members, associated with nearly 20,000 dairy farm operations, and as Vice President of the National Purebred Dairy Cattle Association, I am speaking for and on behalf of an additional 15,000 dairymen involved in about 5,000 dairy farm operations with Jersey, Guernsey, Brown Swiss, Ayrshire and Milking Shorthorn dairy cattle, all of which dairy operations are involved in raising calves.

The Holstein Association and the National Purebred Dairy Cattle Association have both acted to oppose H.R. 84, the Veal Calf Protection Act, for the following reasons:

1. The proposed regulations are completely unnecessary from the standpoint of insuring humane treatment of calves. From a legal perspective, there are laws in place to deal with relatively few inhumane practices. From an economical perspective, calves are well cared for and well treated simply as a matter of practical management that optimizes financial return.

2. The Bill is written in such a way that the proposed regulations could be brought to bear on all calf raising operations, forcing unnecessary and, in some cases, impossible expense for many dairymen as well as for veal calf growers.

3. The implementation and administration of the proposed regulations would add an unwarranted financial burden to the USDA budget that is already experiencing reduced funding for programs and services that are critical to the well-being of animal agriculture.

4. The proposed regulations will impose government jurisdiction, direction and regulation on a segment of animal agriculture that can easily be expanded to include other segments, if precedent is established. This is in contrast to growing public sentiment and responsible farm organization positions calling for less government involvement in managing the practices and procedures of those growing crops, raising livestock and producing milk.

As for the type of facility in which to raise calves, there are different needs and preferences, given the wide variation of climate and intensity of land use in United States, and each producer in this democratic society must be free to choose.

I know many dairymen agree with me that confinement of small calves makes it easier to give each calf individual attention. You can better protect the young calf, better monitor and guard its health and better assure its proper nourishment. The same rationale would apply to veal growers.

The veal industry provides a market for dairy bull calves. This is important income to dairymen and a useful product of the dairy industry, adding to the total efficiency of the dairy industry as a producer of wholesome human nutrition, particularly protein and mineral, in the form of milk and meat.

The remarkable progress of the young veal industry and the calf raising operations of all dairymen has come about because these producers have accepted the results of research that was accepted within the scientific community and tested by practical application. Along with accepting new innovations in technology that continue to improve the well-being of the calf and the efficiency with which it is raised, the well-being of the calf in calf raising operations continues to improve. It would be unfortunate if the accusations of cruel and inhumane treatment emanating from emotion which, in turn, is prompted by misinformation originating from those with no first-hand experience, could require calf raisers to revert to outmoded, inefficient and impractical procedures and management practices that cannot meet the high standards of animal nutrition and animal husbandry practices in use at this time.

In closing, I want to emphasize in the strongest way possible the vigorous opposition to the Veal Calf Protection Act by the members of the Holstein Association of America and the members of all dairy breed organizations as represented in the National Purebred Dairy Cattle Association. The proposed regulations are unnecessary from the standpoint of husbandry practices. The cost cannot in any way be justified. There are laws already in place to deal with inhumane treatment of animals. And there are many programs in place to educate producers on the care and management of animals.

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